

ETHNOGRAPHIC OVERVIEW AND ASSESSMENT
FOR NANWALEK AND PORT GRAHAM

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D R A F T

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CHAPTER I: BACKGROUND

INTRODUCTION

Nanwalek (formerly English Bay or Alexandrovsk) and Port Graham (*Paluwik*) are two small Alaska Native villages at the southwestern tip of the Kenai Peninsula in Southcentral Alaska (Fig. 1). Many current residents of both villages trace their origins directly to the Alu'utiq people who lived in a number of permanent and seasonal settlements along the outer coast of the lower Kenai Peninsula between Kachemak Bay and Prince William Sound, in what is now Kenai Fjords National Park. The Alu'utiq are also known as Pacific Eskimo or Suqpiak, and the people often call themselves "Aleuts." The subgroup of Alu'utiq who occupied the outer Kenai coast are called the Unegkurmiut in the ethnographic literature. The name literally means those who live "down that way" (Ukatish 1997:pers. comm.) and may have been applied by Prince William Sound Alu'utiq to refer to those other Alu'utiq who lived along the outer Kenai Peninsula coast.

The ancestry of Nanwalek and Port Graham people also extends to former residents of Kodiak and Afognak islands, to early Russian immigrants, and to more recent arrivals. In the 1880s, the last permanent occupants of the outer Kenai coast villages moved to Nanwalek and Koyuktolik Bay at the request of the Russian Orthodox priest residing in Kenai. But even before this permanent move of Native inhabitants from the outer coast to Nanwalek, there had been over one hundred years of European exploration, fur trading, and other development activities in the region. These activities caused major changes in the social organization and territory of the Unegkurmiut.

This report is an overview of the culture and history of the people of Nanwalek and Port Graham from the time of contact with Europeans and Americans until the present. It discusses the relationships between the Unegkurmiut of the period of contact with their culturally affiliated neighbors, the other groups of Chugach Alu'utiq who occupied Prince William Sound. The ethnography details the historic and contemporary Unegkurmiut social organization and traditional behaviors, religious rituals and beliefs, traditional subsistence use patterns, oral history narratives, and genealogies which demonstrate socio-cultural links between the people of Nanwalek and Port Graham and the geographic area of Kenai Fjords National Park. Throughout the report, quoted sources reference "English Bay," which was named "Alexandrovsk" by the Russians and recently renamed "Nanwalek," its Alu'utiq name, by its current residents.

In the late 1700s, the Unegkurmiut came into contact with Russian fur traders who had exploited the sea otter as a source of valuable fur throughout the Aleutian Islands, along the Alaska Peninsula, and around Kodiak Island. This report describes the effects of the interaction with Russian traders and the Russian Orthodox Church on the Unegkurmiut, and the sociocultural and economic changes which came with the subsequent control of Alaska by the United States. Discussed are some of the impacts of Euro-American immigrants, the fur trade, the commercial fishing industry, schools, and territorial and state government institutions. The report ends with a description of the contemporary communities that identifies current issues which are shaping their way of life today.

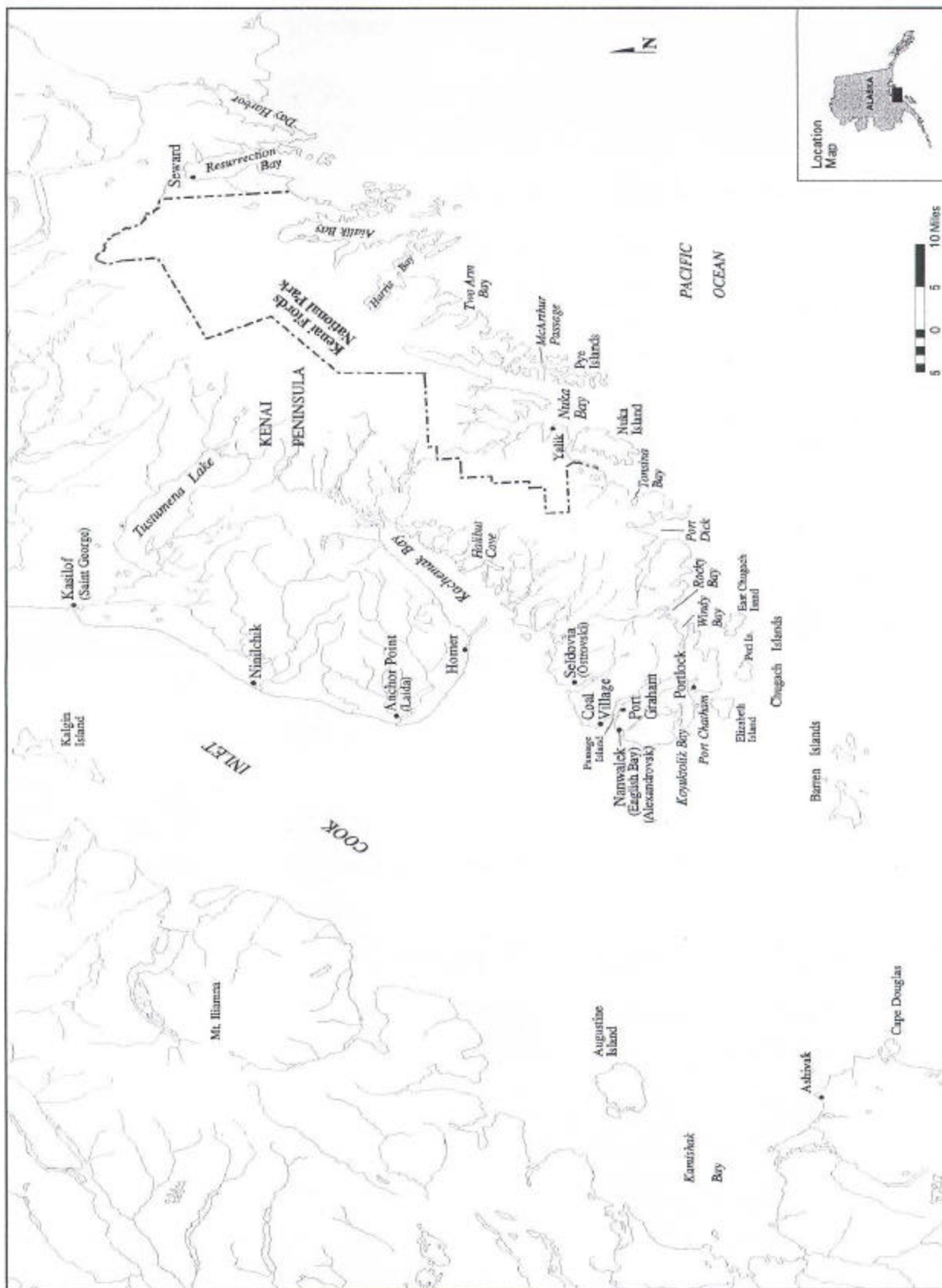


Figure 1. Lower Cook Inlet and Gulf of Alaska.

The information in this report was gathered from a variety of sources including published and unpublished literature, oral history recordings from Nanwalek and Port Graham residents, ethnographic field notes, and personal interviews with descendants of outer Kenai Peninsula coast residents. An emphasis was placed on presenting information not readily available in other sources and not unnecessarily repeating this other information.

NATURAL ENVIRONMENT

The traditional territory occupied by the Alu'utiq people encompasses much of the Gulf of Alaska including Prince William Sound, the lower Kenai Peninsula, the Kodiak Island Archipelago, and the Pacific coast of the Alaska Peninsula. Nanwalek and Port Graham are located in Southcentral Alaska near the tip of the lower Kenai Peninsula and on the outer reaches of Kachemak Bay where Gulf of Alaska and Cook Inlet waters meet. Cook Inlet is a large tidal estuary of the gulf, and is about 231 miles (370 km) long and 83 miles (133 km) wide at its entrance. Kachemak Bay is an eastern arm of the lower inlet, and is about 46 miles (75 km) long. It has inner and outer reaches which are separated by the Homer Spit. The shoreline along the southeast side of Kachemak Bay and the lower inlet is fairly rugged with coves, bays, and fjords (Selkregg 1974:19).

The landscape of the region is a very dynamic one which has frequent tectonic movements, earthquakes, several volcanoes, and occasional tidal waves. Most of the area is mountainous, and rides on the plunging North American plate of the earth's crust. Consequently, the shoreline tends to be rugged, abrupt, and fringed with many small islands. The 1964 Alaska earthquake caused massive land subsidence along the outer Kenai Peninsula coast, while areas toward Prince William Sound were dramatically uplifted.

The most prominent features of the landscape are massive glaciers, both landlocked and tidewater, and the Harding Icefield which are found in the central and northeastern portions of the park. They have shaped the area by carving deep fjords and bays along most of the coastline. Many of these glaciers have receded great distances in the last 100 years. The southwestern tip of the peninsula is free of glaciers, and is mostly low alpine mountains with a few prominent peaks. There are many small rivers and streams draining the land surface, and at their mouths are often found small lagoons or tidal flats. Relatively few freshwater lakes are found on the lower Kenai Peninsula.

In terms of the area's living natural resources, there is a relatively greater variety and abundance found in the marine environment than on the land. Coastal rainforest occupies much of the ice-free land area, while the marine area is primarily coastal fjord. This has strongly influenced the way of life of people occupying the area. Which is to say, the economy of the area's human inhabitants has been oriented toward the sea and its resources more so than the land, especially in pre-contact (before contact with Europeans) and in early historic times.

In terms of the resources found in the marine and estuarine environments, there is a vast array of animal and plant communities. In the coastal salt marshes and wetlands there are over 15 different families of plants. Typically, in the upper zone salt marshes can be found ryegrass and sedges,

goosetongue plantain, and beach lovage. Brown and green marine algae are found in brackish stream mouths. Eel grass is an extremely important food and cover for many species of wildlife and occurs in saltwater lagoons and bays. In shoreline saltwater areas are found the fucus rockweed, laver, dulse, sea lettuce, and bull kelp, all of which are favorite foods of subsistence gatherers.

Most prominent among the marine animals encountered along the Kenai coastline are seals, sea lions, and sea otters. All three species have played important roles in the cash and subsistence economies of Alu'utiq peoples. Haulouts and rookeries can be found on islands and large rocky areas along the coast. Whales, including beluga, minkie, orca, and gray as well as Dall and harbor porpoise, inhabit the waters of the Gulf of Alaska and lower Cook Inlet.

Approximately 100 species of birds occupy the marine and intertidal areas of lower Cook Inlet. These include many species of waterfowl such as scooters, mallards, harlequin ducks, goldeneye ducks, Canada geese, and black brant. Several species of gulls and other marine birds such as puffins, kittiwakes, and murrelets utilize the area for migration, over-wintering, and breeding. Birds and their eggs have been and continue to be part of the subsistence food resources of the Gulf Coast Alu'utiq.

Both finfish and shellfish make up large portions of the wild resources in the marine ecosystem. There are seven groups of finfish important to lower Cook Inlet communities' economies; these include salmon, char, herring, codfish, smelt, flatfish, and rockfish. Major seasonal changes occur in the presence of such groups as salmon, smelt, and herring based on their migration and spawning activities. The peak of the adult salmon migration occurs in mid-summer as the five species of salmon move into their natal streams to spawn. Abundant populations of shellfish such as king, Dungeness, and Tanner crab once occupied lower Cook Inlet. Heavy commercial harvests in the 1950s and 1960s reduced these species to fractions of their former numbers. Nevertheless, crab and a number of other intertidal and subtidal shellfish including butter clams, blue mussels, cockles, and scallops are important in the local communities' economies. In addition, a variety of smaller shellfish species are important, and these include chitons, octopus, sea urchins, sea cucumbers, whelks, and snails.

In the terrestrial environment, the relatively mild maritime climate produces luxurious plant life. There are three zones of vegetation, including the coastal hemlock and Sitka spruce forest, which shrouds the coastal shoreline. Above this forest is a thick band of alder and salmonberries, and topping the mountains are alpine tundra and barren grounds. Important species in these vegetative zones are spruce, hemlock, cottonwood, and mountain ash trees, salmonberry, blueberry and a variety of other berry species. Devil's club, willows, ferns, and mosses form the forest understory.

About 40 species of land mammals inhabit the area. Among the larger species are moose, mountain goat, black bear, and brown bear. Furbearers include wolverine, wolf, coyote, lynx, fox, river otter, mink, and weasel. Also inhabiting the area are porcupine, snowshoe hares, and hoary marmot along with several smaller species such as red squirrel, voles, and shrews. Terrestrial bird species include spruce grouse, willow ptarmigan, common raven, northwestern crow, goshawk, merlin, sharp-shinned hawk, and bald eagle. Smaller species include the American robin, varied thrush, Steller's jay, black-billed magpie, white-crowned sparrow, and yellow-rumped warbler.

PREHISTORY: ARCHAEOLOGY OF THE OUTER KENAI PENINSULA

Very little information was available on the prehistoric occupants of the outer Kenai Peninsula coast until specific studies began in the mid to late 1980s (McMahan and Holmes 1987). Following the *Exxon Valdez* oil spill in 1989, more extensive survey work took place (Schaaf and Johnson 1990; Haggerty et al. 1991; Crowell 1993). One of the major factors influencing the archaeological record of the outer coast was the Little Ice Age which lasted from approximately 1100 A.D. to 1850 A.D. Glacial fluctuations were a critical factor in determining the paleo-environmental factors that governed human use of the inner fjord zone of the coast. Land subsidence was also a factor which caused the disappearance of potential human occupation sites along the coast.

The recent archaeological studies, noted above, have found evidence of extensive occupation of the outer coast in pre-contact times. Archaeological sites are located on the mainland opposite the northern and southern ends of Nuka Island, along McArthur Pass, and in Resurrection, Aialik, and Harris bays. In addition, occupation of some sites such as Yalik Bay, Port Dick, Windy and Rocky bays lasted well into the 1800s. All these locations are mentioned in historical journals and Native oral history as habitations of outer coast Natives during and after contact. Extensive documentation by early European explorers appears to have been limited by the difficult navigability of the outer coast.

For the inner, lower Kenai Peninsula, archaeological evidence from studies by de Laguna (1934), Workman and Workman (1988), and Workman, Lobdell, and Workman (1980) document occupation of Kachemak Bay by Eskimo groups well before contact with Europeans. The studies found evidence of a strong orientation toward a maritime subsistence way of life. This included a highly specialized technology for hunting marine mammals like seals, sea lions, sea otters, and whales. There are also remains of land mammals such as bear, goat, and marmot in some sites. Because they are often not well preserved, finfish and shellfish remains are not very abundant in the earliest sites, such as those dating to around 3,500 years ago. In more recent sites there is increased evidence of the use of shellfish and finfish; however, marine mammals were still the primary food item.

Habitations were of two types: more or less permanent semi-subterranean dwellings called *barabara* in Russian or *ciqlluaq* in Alu'utiq, and temporary, seasonal campsites. This indicated a degree of seasonal movement predicated by the presence of specific food sources like seal or sea lion haulouts, shellfish beds, whale migration routes, and salmon streams.

During about the last 1,000 years before contact with Europeans, the archaeological record shows a culture much like that found at the time of contact. This included elaborate types of tools such as ulus, toggle harpoons and spear points, adzes, and oil lamps, and stylized ornamentation on many tools. There was also a complex development of personal adornments such as labrets, and ceremonial implements such as masks, figurines, rattles, and drums which indicate dance as part of seasonal celebrations. After contact with Europeans, trade items such as glass beads, porcelain, and metals appeared, and they are frequently found in post-contact sites.

CHAPTER II: PRE-CONTACT AND PROTO-CONTACT CULTURE

THE UNEGKURMIUT AND THEIR CULTURALLY AFFILIATED NEIGHBORS

The current Port Graham and Nanwalek residents are a mixture of Alu'utiq (Pacific Eskimo), American Indian, Aleut, Russian, Euro-American, and Asian ancestry. This is a result of intermarriages, which occurred among the Natives and different cultural groups, primarily following Euro-American occupation of the area. Most of the Native residents trace their heritage to places along the Gulf of Alaska, including Nuchek, Tatitlek, and Chenega in Prince William Sound; Kodiak and Afognak islands; Resurrection, Aialik, Yalik, Rocky, Windy, Chugach, and Koyuktolik bays and Port Chatham on the lower Kenai Peninsula coast; and Nanwalek, Port Graham, Seldovia, and other Cook Inlet communities.

The indigenous inhabitants of the lower and outer Kenai Peninsula are the Alu'utiq, also known as the Pacific Eskimo or Suqpiak. The Native language of the region is also called Alu'utiq, or Sugcestun. It is a member of the Eskimo family of languages and can be split into two mutually intelligible dialects: Koniag Alu'utiq and Chugach Alu'utiq. The former is spoken on Kodiak Island and along the Pacific coast of the Alaska Peninsula. Chugach Alu'utiq is the dialect spoken by the Native people of Port Graham, Nanwalek, and Seldovia; in former communities along the outer coast of the Kenai Peninsula; and in Prince William Sound communities (Fig. 2) (Leer 1978:3; Woodbury 1984:53). This geographic area included nine separate social groupings (Birket-Smith 1953:99), one of which was the Unegkurmiut people who lived along the outer Kenai Peninsula and in what is now the Kenai Fjords National Park. Ancestors of people living in Port Graham and Nanwalek today occupied settlements and seasonal camps throughout this area.

Archaeological and historical data provide considerable insight about the pre-contact inhabitants of the outer and lower Kenai Peninsula. Significant information demonstrates that the Chugach Alu'utiq occupied the lower and outer Kenai Peninsula coast at the time of and prior to contact (McMahan and Holmes 1987; Haggerty et. al. 1995; de Laguna 1956; Nanwalek and Port Graham residents pers. comm. 1996 and 1997). McMahan and Holmes (1987:14) describe archaeological sites on the mainland opposite the northern and southern ends of Nuka Island, while Schaaf and Johnson (1990) investigated sites at McArthur Pass. Crowell (1993) summarizes site studies at Resurrection, Aialik, Harris, and Nuka bays. Most of these locations are mentioned in historical journals and Native oral history as settlement sites of outer coast Native occupants during and after contact (Table 1). The following discussion summarizes archaeological and historical information, and provides oral history accounts from Port Graham and Nanwalek residents about their ancestral connection with the Unegkurmiut.

Accounts of the outer Kenai coast by 18th century fur traders and explorers provide some descriptions of the Native inhabitants of the area. Expeditions led by Captain James Cook (Beaglehole 1967:344-346), and captains Dixon and Portlock (in 1789) had trade relations with the Chugach Eskimo in Prince William Sound and lower Cook Inlet. Two expeditions in particular, those of Captain Joseph Billings and Captain Gawrila Sarytschew (Sarychev) in 1790, and of Captain George Vancouver in 1794,

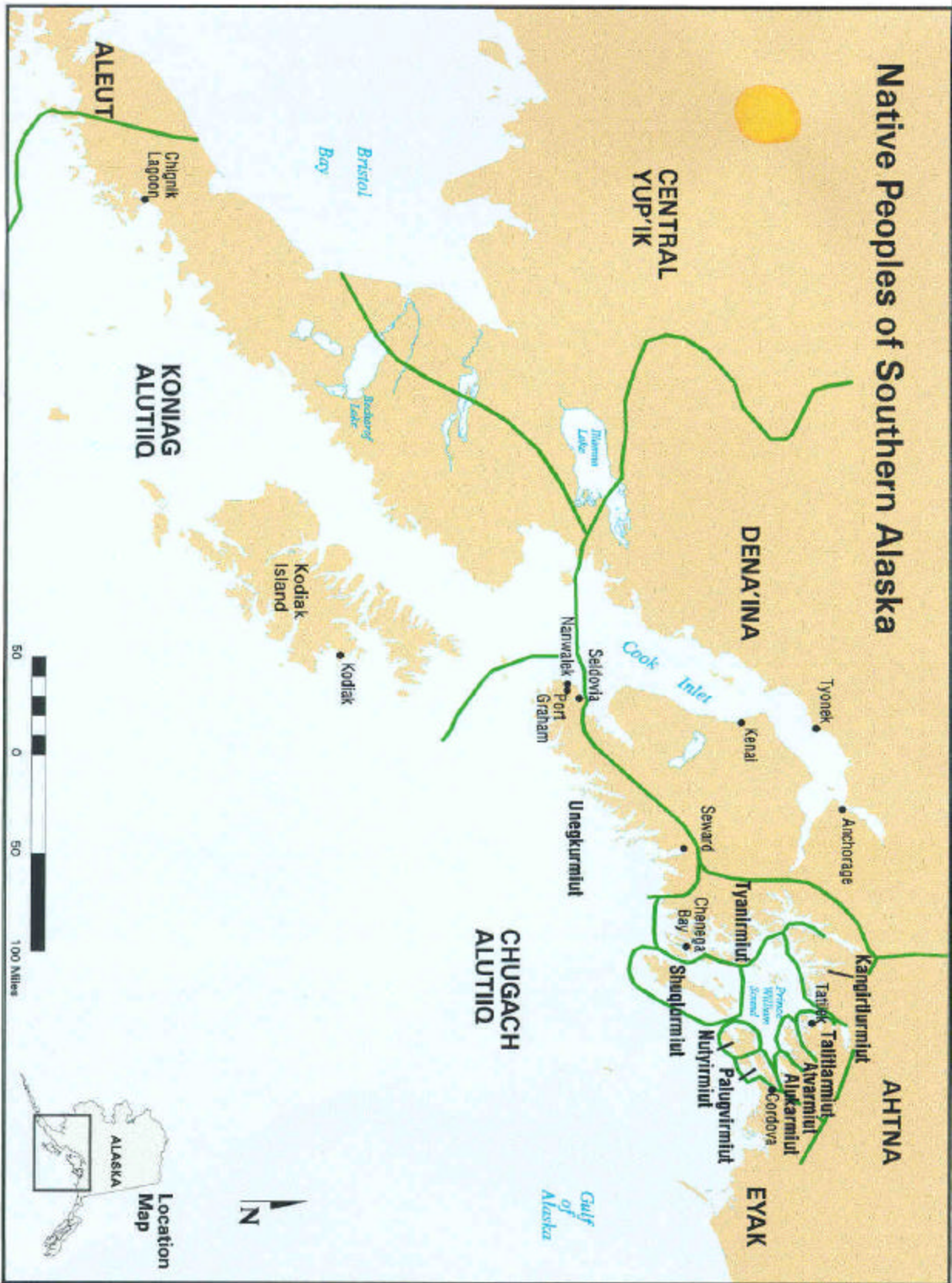


Figure 2. Native Peoples of South-central Alaska.

Table 1. Settlements and Historic Population Estimates for Lower Cook Inlet and Outer Kenai Peninsula Coast

Settlement/Community	Pre-1880	1880	1890	1900	1910	1920	1929	1939	1950	1960	1970	1980	1990	
Kanqiak (Day Harbor)	*	DeLaquna notes there were villages in Day Harbor and a group called the Kanirmiut or "Bay People."												
Qutalleq (Resur. Bay)	*	A village mentioned by one of Birket-Smith's (1953) informants.												
Kani'lik (Two Bays)	*	DeLaquna notes this may be Two Arm Bay. Birket-Smith (p.116) indicates Kangilik as near Seward.												
Aialik (Aialik Bay - several sites)	*	Archaeological sites (Schaaf 1988); Oral tradition (McMullen 1997) describe occupation. Residents moved to Nanwalek and Koyuktolik Bay in mid 1800s.												
(Two Arm Bay)	*	Archaeological site and found in oral history.												
(McArthur Pass)	*	Extensive archaeological evidence, Schaaf and Johnson (1990), indicates resident population in last 1,000 years.												
Nuka Bay (Ualeq in DeLaquna.)	*	A number of village and camp sites on west side of Nuka Is.(Crowell 1993).												
Yaaliq (Yalik Bay)	NDA	32	Billings 1790 expedition met the Yalermiut. Moved to Nanwalek and other Cook Inlet communities in the 1880s.											
Kanqiliq (Port Dick)	*	West arm of Port Dick (Leer et al.). Vancouver's expedition encountered a large number of Natives in kayaks. Same name of village near Seward.												
Taqaluq (Rocky Bay)	*	Oral history of Port Graham and Nanwalek residents and Leer et al. 1980.												
Kaniaqaluq (Picnic Harbor)	*	Oral history of Port Graham and Nanwalek residents.												
Nunalleq (Windy Bay village)	*	Oral history of Port Graham and Nanwalek residents and Leer et al. 1980.												
Ashivak (Cape Douglas)	NDA	46	85	Aband.	--	--	--	--	--	--	--	--	--	
Tamarwik	*	A small village and travel stop at Anderson Beach on the mainland north of Perl Island. A sockeye stream and good harbor seal area.)												
Arrulaa'ik	*	(Clam Cove Village located at Port Chatham - inhabited at the time of Vancouver's expedition in 1794)										--	--	--
To'qakvik (Chrome Village)	*	Based on DeLaquna's informants, this was the village at the site of Por							--	--	--	--	--	
Portlock (Port Chatham)	--	--	--	Established in 1915		47	NDA	--	--	--	--	--	--	
Ququyuqtuliq (Dogfish Bay)	*	DeLaquna and oral history of Port Graham and Nanwalek residents. Abandoned in the 1930s.										--	--	--
Nanwalek (English Bay)	20	88	107	NDA	NDA	NDA	107	48	75	78	58	124	158	
To'qakvik or Coal Village	100	Established in the 1850s, moved to Nanwalek in the 1860s.							--	--	--	--	--	
Paluwik (Port Graham)	*	--	--	--	Established in 1912		NDA	93	92	139	107	161	166	
Seldovia (Ostrovski)	NDA	74	99	144	173	258	379	410	460	460	437	473	459	

Sources: Rollins 1978; DeLaquna 1956; Meganack 1982; Tanape 1983; Birket-Smith 1953; Schaaf 1988; Schaaf and Johnson 1990; Crowell 1993; Leer et al. 1980; Alaska Department of Labor 1997

* Permanent or seasonal settlements in pre-1880s. Documented by archaeological and or oral history information.

NDA Site was occupied but no population estimates available.

provide the most information on the outer Kenai coast inhabitants. The 1790 Billings expedition went to the northwest Gulf of Alaska to conduct geographical and astronomical investigations of Russia's latest possessions. On the journey was naturalist Carl Heinrich Merck; he and Sarychev kept journals of their observations (Merck 1980). The expedition left Kodiak and sailed to Cook Inlet where they arrived in early July of 1790. They spent several days in thick fog, and drifted on the tide. Finally, on July 12th they sighted land about five miles away. Shortly thereafter they were approached by Natives.

We soon after saw two Americans, rowing up to us in a single-seated baidar. Before they got up to our ship, they made a stop, and extending their arms, repeated the word *Cal!* *Cal!* We invited them by our interpreter to come on board, but they appeared to be long irresolute; and when induced by our repeated assurances to venture, they complied with manifest signs of apprehension.

From these Americans, we learned, that the bay ahead of us was called Nuka, and the cape that presented itself on its eastern side, belonged to an island, which was separated from the mainland only by a strait.

After six o'clock two Americans, in boats similar to those on Kodiak, came toward our ship from the mainland. As they approached they signaled their peaceful intention by waving their hands, with fingers spread apart, up and down, and from side to side. We answered them repeatedly in the same manner until we laid by and dipped the flag several times. Then they came along our ship. They brought a river otter as a gift, also a young sea otter, and young seal, and a petrel; probably all they had hunted, during the day. The petrel's beak was yellow, intermingled with black. The bird was white underneath, and of the size described above (*Puffinis tenuirostris*). One man wore a parka made of evrashka (ground squirrel) skin, the other a bear-parka. Both wore rain shirts over the top, which reached only to a little above the knee and a little above the elbow.

The inhabitants of the continent here are called the *Chugachi*. They live at peace with the Russians and visit with them for the purpose of barter trade.

Vancouver's 1794 expedition (Vancouver 1984:1264) along the outer Kenai coast and into Cook Inlet encountered Natives at Port Dick (Plate 1), a short distance south of Nuka Bay.

A numerous fleet of skin canoes each carrying two men only were about the Discovery ...it was computed that there could be not less than four hundred Indians present. They were almost all men grown, so that the tribe to which they belonged must consequently be a very considerable one.

Although there were exploratory expeditions after the two major ones noted above, most were into Prince William Sound and Cook Inlet, with very little documentation of the outer Kenai Peninsula. During the 1880 census Petroff (1884:29) reported 32 Eskimos in the village of Yalik. The site had been abandoned when visited by the U.S. Geological Survey in 1911 (Grant and Higgins 1913). Later occupants of the Nuka Island area found wooden masks in a cave on the mainland across from the island. Although census reports indicate there were no Natives permanently occupying the coast from Cape Puget to the mouth of Cook Inlet after the 1880s, oral traditions told by Port Graham and Nanwalek residents indicate otherwise (see below).

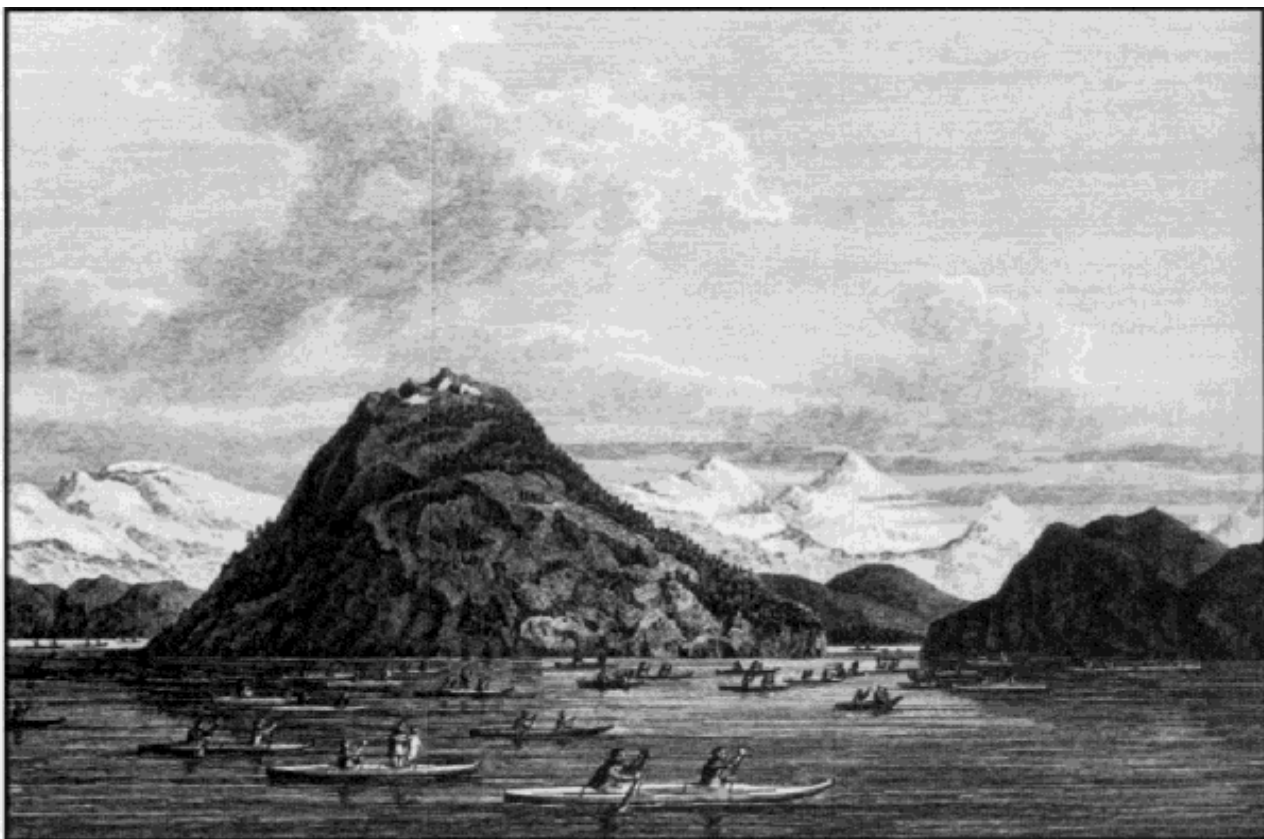


Plate 1. Natives encountered at Port Dick by Vancouver's 1794 expedition along the outer Kenai coast.
Courtesy: National Archives, Washington D.C.

In the early to mid 1900s, archaeologists and ethnographers began studying the Native cultures of Prince William Sound and lower Cook Inlet. According to Birket-Smith (1953:99), the Unegkurmiut of the outer Kenai Peninsula were a group of Eskimo "closely related" to the Chugach of Prince William Sound. Describing the territory of the Prince William Sound Chugach, Birket-Smith (op. cit.) lists eight geographical groups based on "their principal village or some other remarkable locality within their territory." Birket-Smith notes that,

Their nearest kinsmen to the west were the Eskimo of Resurrection Bay (Seward or Outatluq), Nuka Bay, and the Port Graham Eskimo or Nanualirmiut ("people of the lake mouth") on the tip of the Kenai Peninsula. They were also called Unikhkurmiut and probably occupied most or all of Cook Inlet before the Athapaskan advance.

Birket-Smith's principal source on the ethnography of the Chugach was Makari Chimovitski (Alu'utiq name of Alingun Nupatkerlugoq Angakhuna), who, at age 86, was one of the oldest Alu'utiq people of Prince William Sound during Birket-Smith and de Laguna's 1933 ethnographic expedition. Birket-Smith (1953:19) refers to Makari's statement of considering himself an Eskimo of the group living in Prince William Sound but not including those living toward Seward, Nuka Bay, and farther west. Makari's statement might seem to dissociate the outer Kenai coast people from those in the Sound generally referred to as Chugach, but his view may be attributed to local idiosyncrasies or his unfamiliarity with the group to the west. In contrast, von Wrangell in the 1830s (in Birket-Smith 1953:18) wrote that the western boundary of the "Chugach territory" was the mouth of Cook Inlet. This was 50 years prior to when outer Kenai Peninsula inhabitants moved to the southwest end of the peninsula, to settlements such as Port Chatham, Koyuktolik, Nanwalek, Port Graham, and Seldovia. De Laguna (1934:35) suggests the Unegkurmiut may have been divided into several independent tribes. Also, a group occupying the Day Harbor area were known as the *Kaniarmiut*, most likely a local group occupying several villages. In any case, the Unegkurmiut were dialectically more similar to Prince William Sound Alu'utiq than to the Koniag (Leer 1978: 3), and therefore are considered here on an equal level of hierarchy with Birket-Smith's eight other geographical groups.

Because of the complex movements of Prince William Sound and outer Kenai Peninsula people, the degree of similarity between the Unegkurmiut and the Prince William Sound Chugach groups at the time of Russian contact is difficult to determine at present. Inter marriages and trading were reported between the Unegkurmiut and other groups in the Sound. There were many territorial disputes between Chugach and the Eyak and Tlingit Indians to the east. These conflicts apparently caused frequent upheaval, instability, and displacement among the Chugach.

The conflicts continued after contact with the Russians, who were slow to stem the fighting between Indians and Eskimos in the Sound. Although the fighting eventually stopped, traditional group boundaries within the Sound were less defined and recognized as the desire for trade goods resulted in a concentration of Natives at Nuchek. Simeon (Anahonak) Kvasnikoff, who is in his 60s and has lived in Port Graham all his life, recalled that the conflicts spurred people to move in the mid to late 1800s:

...my great grandfather (who came from Nuchek) went on a kayak out to Kodiak. In between there or on Aialik my daddy was born, and he came from Kodiak up to Seldovia and met mom and they got married.

Written documents from the 1780s and oral traditions tell of inner Kenai Peninsula coast use by Native inhabitants. Much of this use appears to have been seasonal. For example, Portlock's (1789:105,107) accounts of scattered huts along Port Graham bay suggest seasonal fishing and hunting camps used by outer coast people who traveled to the area to take advantage of the rich salmon runs into the Port Graham and English Bay rivers. It is not unreasonable to assume that the inner coast was accessed by kayak and overland portage during contact and historic times from the outer coast. It is a distance of about 10 miles overland from Windy Bay to Port Graham and seven miles from Port Dick to Tutka Bay. These would be likely land travel routes to access Kachemak Bay from the outer coast. There are abundant game trails between these areas, and S. Kvasnikoff (1996:pers. comm.) tells of trails and different types of rest shelters along the trails used by people traveling across the lower peninsula between communities and hunting areas during the late 1800s and early 1900s. People going back and forth carried messages and material goods, and they gathered wild resources. Special shelters were built along the way so that travelers had a place to stay when they needed it. These were located at certain strategic spots where there was a supply of water, fish, and other opportunities to harvest other food resources. In addition, special shelters were built out of driftwood on the shorelines along coastal travel routes.

De Laguna's archaeological work in the 1930s identified six former village sites along the outer Kenai Peninsula coast: a settlement at Yalik Bay; a village site called *Nunatunaq* at Rocky Bay; a site called *Axu'layik* at Port Chatham; a village site in Chrome Bay called *Togakvik*; and a village site called *Kogiu'xtolik* at Koyuktolik (Dogfish) Bay. Additionally, at the eastern end of the Unegkurmiut territory, Aialik Bay was an occupation site that appears in oral traditions and holds considerable archaeological evidence of contact and precontact occupation at Verdant and Bear coves (Crowell 1993).

At both Nanwalek and Port Graham, archaeological evidence indicates Native occupation of the area prior to Russian contact (Portlock 1789; de Laguna 1975; Workman 1996: pers. comm.). Evidence shows that prior to the coming of Russian fur traders, the area around Nanwalek and Port Graham was used, at least seasonally, by the Native inhabitants of the outer Kenai Peninsula. Birket-Smith (1953:99 [op. cit.]) notes that,

In their capacity of the easternmost outpost of the Eskimo on the Pacific coast, the Chugach were in contact not only with other tribes of their own stock but also with several Indian tribes.

The oral history of Port Graham and Nanwalek residents tells of their ancestors' migration from villages in Prince William Sound to villages in Aialik and Yalik Bays. For example, Sergius Moonin, a son of Nicholas and Marfa Moonin, and a prominent Alu'utiq speaker and sub-deacon in the Russian Orthodox Church (1981: 43) states that,

A long time ago, Yalik was the capital. English Bay was the next capital. People moved from Windy Bay, Port Chatham, Dogfish Bay, and Yalik to English Bay . There were 600 people in English Bay one time. They were all Aleuts [i. e. Alu'utiq].

In referring to English Bay (Nanwalek) as the “capital,” Moonin meant that the settlement was the focus of activities and was a population center.

Before her death in 1959, Elenore McMullen's 74 year old grandmother, Anesia, told about her

*The late **Sergius Moonin** was born in 1905 in Nanwalek and lived there until he was 13. He then lived in Port Chatham for nine years where he went to school. In his twenties, he moved back to Nanwalek where he lived for another fifteen years and was married to Luba Anahonak. His grandfather on his mother's side was Peter Maha from Yalik. On his father's (Nickolie) side, his grandfather was John Moonin who had come from California via Kodiak. His father was the priest in Nanwalek for many years. Sergius was a reader in the church, and eventually became a sub-deacon. He was also a prominent Sugcestun speaker, and a commercial fisherman.*

childhood and living as a young girl at Aialik Bay (Plate 2) (McMullen 1997). She explained that her family had come from Nuchek and spent some time at Chenega and several places along the coast. Her family had fled the area because of warfare among Native people in the Sound. In search of a safe-haven, they made their way to Aialik and found it a very bountiful place with lots of food and fur. There were several barabaras of other families there too. The only difficulty with the bay was that it was extremely cold. McMullen estimates that when her mother was about 11

years old, the family moved to Nuka Island. They again moved to Windy Bay, and eventually to Koyuktolik Bay (Plate 3) where they had a semi-permanent residence along with a place on the north shore of Port Graham. When the cannery was built in 1912, they moved to the village side of the bay.

***Elenore (Norman) McMullen** was born in Port Graham in 1939. There were seven in her family. She went to school in Port Graham and Seldovia. From age 11 she worked in a cannery. She attended Mt. Edgecomb in practical nursing. She worked at the ANHS hospital in Anchorage, at which time she met her husband Bob who was in the military. They lived in the lower 48 for 11 years, and then moved back to Port Graham with their five children. Elenore was health aide in Port Graham in 1975. She was involved in village council for 18 years and became village chief in 1990. She is a Sugcestun speaker, and is involved in Russian Orthodox church. She now has nine grandchildren.*

The migration of many ancestors of present-day Nanwalek and Port Graham residents from Prince William Sound to the outer Kenai Peninsula coast resulted from several factors, including depressed fur prices in the mid 1800s; warring activities of Native groups in the Sound; and the scarcity of resources caused by the large concentration of people at Nuchek (Golovin in Hassen 1979:187). A fourth factor contributing to the movement was the pressure from the Russian Orthodox Church to move its followers closer to where they could be serviced by the priest residing in Kenai. The dependency on certain



Plate 2. Aialik Bay was once the site of a Native village. Courtesy: Port Graham Corporation



Plate 3. Koyuktolik Bay, means “a place with swans” (also Dogfish Bay), was last occupied in the 1940s.

trade goods (Tikhmenev 1939-40:267-268) which became staples for the Native population no doubt had a strong influence on their movement to sites near trading posts and supply centers. By the mid to late 1800s, jobs in the logging, mining, and cannery industries attracted many people to settlements. For example, Nanwalek's entire population moved to the coal mine, Coal Village (*To'qakvik*, one-by-one, a place for stepping ashore) at the mouth of Port Graham in the 1850s. Census data, voyagers' journals, and oral history document locations of former and current occupation sites of the Unegkurmiut (Table 1).

Further evidence of current Nanwalek and Port Graham residents' ancestral ties to outer Kenai Peninsula communities is provide by the origin of family names. For example, the Meganack family lived in Nanwalek prior to moving to Port Graham. Before that, Walter Meganack Sr.'s father was born at Yalik Bay in the mid 1800s. W. Meganack Sr. (1983: pers. comm.) states that:

*The late **Walter Meganack Sr.** was born in Port Graham in 1915. His father, Affanasia, was born in Yalik and moved to Nanwalek. Walter was raised by his father and his aunts after his mother passed away when Walter was three years old. Walter was born into a family of hunters whose job it was to provide food for the village. He started school when he was 15 in Port Chatham, but was able to attend for only a couple years because of work and family demands. Walter got involved in village politics and the fishermen's union at an early age. He also worked in the cannery, on fish traps, and became a commercial fisherman with his own drift boat. He was very active in starting projects to benefit the village and traveled to Washington D.C. and Juneau to meet with legislators on important Alaska Native issues. He was a Sugcestun speaker chief of Port Graham from 1959 until 1989, and served a president of the Port Graham Corporation. .*

English Bay and Port Graham people came from Yalik Bay (Plate 4) long ago. After moving to Kachemak Bay, they went to Dogfish Bay for (chum) salmon. Tonsina Bay they went [to] for salmon. Nuka Island was used for sea lion and seal. There were many shelters there all along the shoreline. Yalik village had 500 to 600 people in the old days.

Apparently, W. Meganack Sr. (op. cit.) was referring to stories from the period of sea otter hunting noted by his reference to his father hunting sea otters for the Russians. He goes on the say that:

My father, Affanasia Meganack, was born in Yalik Bay. He was a young boy when the Russians moved his family to English Bay. My mother's folks are from Tatitlek and her family moved (from Yalik) to English Bay too.

Meganack also pointed out that his father worked for the Russian fur traders. Apparently, Walter's father was living at Yalik during the time he was hunting sea otter for the Russians, around 1860.

My family came from great hunters. They always hunted and took care of feeding people. Seal hunters, bear hunters, sea otter hunters. My dad hunted sea otters from (a) Russian schooner. He was just a kid, just a sailor on the Russian schooner. They didn't pay them, they just fed them and took care of them. They took him to the hunting grounds. So they took his kayak and turned him loose.

The Anahonak and Tanape family names are also traced to Yalik. Nick Anahonak was born in Yalik and moved to Alexandrovsk in the late 1800s. Dick Anahonak (1997:pers. comm.) noted that:



Plate 4. Yalik Bay was last occupied in the 1880s by Nanwalek and Port Graham residents.

"My father grew up at Yalik, and they traded the "flint" with people from Prince William Sound." And his sister Luba Moonin (1997: pers. comm.) remarked:

They called us (the kids in the family whose dad came from Yalik) *Ipugiakqak*, which means sharp rocks, because our dad came from Yalik Bay where they got the rocks for making spears.

The late Joe Tanape, while talking about seal hunting, said that he and his relatives used to go all the way around to Seward. There was a winter camp which his grandfather had "over that way," although Tanape did not identify the exact location. The houses were partially below ground and covered with sod. Small sticks and logs were used as roofing. They even made "nails" out of wood. They put grass on the floor so many people could stay there together. Tanape (1983:pers. comm.; 1986:tape trans.) told of traveling during his youth to Yalik Bay and other outer coast seasonal camps for hunting and trapping.

Joe "Cun" Tanape was born and raised in Nanwalek. Joe was married to Sargus Kvasnifoff's sister, Alma. They had seven sons. Joe went to school in Portlock in the 1920s. His primary language, however, was Sugcestun. He was brought up as a hunter and fisherman and was very successful at both. Joe's father and grandfather took him to Yalik when he was young for trapping and hunting. He was able to predict the weather very well. He also knew many traditional folk tales, dances, and songs.

I used to live here (Nanwalek) in 1914, and I lived with my grandmother. We went to live in Nuka Bay for eight months sometimes. And sometimes halfway to Seward. . . I used to go with my grandfather to Yalik. We would stay the winter too. We would start from here (Nanwalek) in the fall on boats. Sometimes six people. We live in barabaras and we even had banyas. We had all kinds of food

there, like seal, sea lions. We would use bear skins for nests or bedding. I used bear skins for blankets and seal skin for shoes, and baby groundhog for clothes. These are stuff I used growing up. These are stuff my grandfather have made for me.

Tanape also noted that:

There were other people (from) places like Seward that used to come also and stayed there with us for the winter. We would come back (to Nanwalek) in May and try to work in the cannery for 10 cents an hour. And then in the fall after we put away fish, we would go back to Yalik, Nuka Bay, sometimes lot more guys come.

Tanape went on to say that:

In 1916 was the last time we went around that area. Because it was getting easier for getting things around here. People from Kodiak used to come up too.

The Moonin name originates with the 1880s missionary John Moonin who came from California. Moonin was of Russian, American Indian, and Spanish background. He moved to Kodiak, married Helen Medvidnikoff of Russian and Koniag ancestry, then moved to Seldovia and finally to Alexandrovsk where he raised a family. His son Nicholas became a teacher and priest, and is the ancestor of many Port Graham and Nanwalek residents.

THE TRADITIONAL ANNUAL ROUND AND SUBSISTENCE USE PATTERNS

Typically, the Chugach Alu'utiq lived in semi-permanent winter villages and in a number of seasonal camps. They moved several times during the year between these locations. This seasonal movement was necessary because of the variability in resource abundance. Hassen (1978:72) concluded that this semi-sedentary settlement pattern was essential for the efficient exploitation of a variety of resources. Since marine mammals are an energy-rich food source and species like seal and sea lion occupy reliable haulouts and pupping areas year-round, semi-permanent settlements could be established near these locations. In order to use more seasonal resources like salmon which were available in different locations during the summer months, the Chugach moved to more temporary seasonal camps.

Merck (1980:105, 205) provided the only account of the early contact period annual round of activities for the Alu'utiq. Other early accounts probably reflect a seasonal round that had been substantially altered to include the harvest of sea otters for the fur trade (Clark 1984: 190). In the early contact seasonal round, seals were hunted from mid-winter through spring. Fishing for herring and eulachon, and gathering herring spawn took place in the spring along with harvesting of newly emerging plants. From spring through mid-fall, men hunted seal, sea lion, whale, and porpoise. Salmon were harvested during times of greatest availability in streams from late spring through fall. Salmon were dried during the summer and stored in caches for winter use. A variety of plants were harvested during summer through fall, including salmon berries, cranberries, goose tongue, chives, and Indian rice. These were stored dry or in seal oil. Fishing for bottomfish such as halibut, and cod occurred throughout the year. Shellfish gathering also went on throughout the year, with extreme low tidal cycles as in the spring being particularly important. Mountain goat and bear hunting occurred mainly during the fall and winter. Taking black bears from dens occurred in the winter. Family units returned to their winter settlements in late fall and early winter prior to winter celebrations and festivities. During early contact times, sea otter hunting was added to the seasonal round, and began in early summer.

SOCIAL AND POLITICAL ORGANIZATION

Traditional Alu'utiq settlements consisted of one or more multi-family household groups, each with perhaps 20 members. Villages themselves might contain 100 to 200 people. The exact organization of the household group is unknown. Post-marriage residence was matrilineal, with the husband going to live with his wife's parents. Thus it is likely that household units contained several nuclear families related through women, such as several sisters, their husbands and children, and their elderly parents. Although women occupied relatively high status in the society, they probably were not directly involved in community governing. Evidence of stratification of the society appears in differential treatment at the time of death, such as mummification and burial in secluded locations (Clark 1984:191-192).

Among the Alu'utiq generally, there appears to have been a "village chief" who provided leadership for the community. Although these positions may have been inherited, personal qualities,

such as generosity, were necessary for a chief to maintain his status. Chiefs were the owners of the *kashim*, a community hall where feasts, public events, and more restricted religious ceremonies took place. Evidently, the Chugach Alu'utiq did not have *kashims*; instead a large house was used for public and private gatherings and ceremonies (Clark 1984:193).

Birket-Smith (1953:92-93) provides more specific information about the political organization of the Chugach of Prince William Sound. Leadership positions were inherited, although leaders who "aroused the displeasure of the villagers" could be "deposed." Each Chugach village, or group of villages, had a "head chief" called a *tujuq* and a second chief called a *sakanjik*. It was the head chief's responsibility to organize hunting excursions, preside over meetings, send out whalers, tell people when to put up dry-fish, and organize military expeditions. Although the chief decided when to go to war, he could not force people to participate. Indeed, people were free to move to other villages without permission from the chief. The chief was usually the richest man in the community. He did very little, if any, work; rather, other people, and sometimes slaves, worked for him. The second chief was supposed to act as "servant" to the head chief, and could not be related to him, "for fear that they might work together."

EXPRESSIVE CULTURE

Traditional Alu'utiq life included a series of ceremonies, dances, masked performances, rituals, and feasts which generally began in early winter and continued while food supplies lasted. Ceremonies included a memorial feast for the dead, an animal increase ceremony, first events (e.g. a boy's first game kill), and celebrations following killing a whale (Clark 1984:193; Birket-Smith 1953:108-114).

As described by Birket-Smith (1953:109), the Chugach wore masks during certain feasts and during shamanistic performances. Masks were carved from wood and painted. Some had animal shapes and some were evidently intended to have a "queer or comical look." Cook (1980:58) refers to a story told by Sergius Moonin about the masking ritual:

Uncle Sergius Moonin (age 74) said that his grandfather, Peter Macha, told him about a sort of masking ritual that took place in the darkest part of the winter by the people of this area before the Russians came. He said they used wooden masks adorned with eagle feathers back then. His grandfather said he remembered seeing this in the village of Yalik (at the mouth of Nuka Bay) when he was a boy.

McMahan and Holmes (1987) provide information on masks taken by a family named Sather, who were living on Nuka Island in the 1920s, from caves on the mainland across from Nuka Island. A variety of masks collected in the 1800s from Prince William Sound are shown in Johnson (1984).

CHAPTER III: THE RUSSIAN PERIOD

The first recorded contact between Europeans and the Alu'utiq of lower Kenai Peninsula was in 1778 when Captain James Cook sailed into Prince William Sound and Cook Inlet where he traded with the Natives. Cook found an abundant supply of fur including sea otter. Next was contact with Russian fur traders, the *promyshlenniki*, of the American Northeast Fur Company, in pursuit of sea otter pelts. A redoubt (fort) was built to establish the presence of Russian fur traders in Cook Inlet at present-day Nanwalek in 1785 as Fort St. Alexander or Alexandrovsk by Gregor Shelikov, head of the Shelikov-Golikov Company. The Russians established a trading post at Nuchek in Prince William Sound in the following year. The period of Russian occupation in lower Cook Inlet lasted until 1867, and ended with the sale of the Alaska territory to the United States. Establishment of the Russian Orthodox Church was a major legacy of the Russian occupation which has lasted to the present day.

The Russian fort and trading post may have signaled the first arrival of permanent residents at Nanwalek. Once a trading post was established, both Russian company employees and Native inhabitants of the area settled nearby. Smaller settlements were located at Koyuktolik Bay and Port Chatham. In 1786 Nathaniel Portlock (1789:100-108) arrived at Alexandrovsk and noted in his journal that there was no indication of prior permanent Native settlements at Port Graham or near the Russian fort. However, he did note the presence of temporary camps which had recently been abandoned along the shoreline of Port Graham. He reported that among the Russians were Koniag and Aleut Natives, and that they appeared wary of being attacked by local Dena'ina Athabaskan Indians. Indeed there was reason for this apprehension, as shortly after the Russians arrived the local Natives allied with a Koniag chief in an attempt to overcome the Russians and drive them away. This attempt failed, and the Russians continued to supplant and disrupt the Native populace as had happened in the Aleutian Islands and on Kodiak Island.

The change from a subsistence-based culture to a mixed subsistence cash economy began for the Unegkurmiut with the founding of Fort Alexandrovsk (Nanwalek). Unegkurmiut hunters were, presumably, absorbed by the Russian hunting fleets which were composed of Aleuts, Koniags, and other Chugach supervised by Russians. Eventually, the groups intermarried with the local Unegkurmiut and with the Dena'ina living along upper Cook Inlet. Many descendants of these intermarriages retained the Alu'utiq language mixed with Russian and Dena'ina; however, they chose to call themselves Aleut. Apparently, people believed that being considered Aleut meant one would be given good treatment by the Russians.

FUR TRADE

The first attempts by Russian fur hunters to harvest sea otters were met with hostile resistance from the Prince William Sound Alu'utiq. However, the Russians were quick to forcefully suppress the Natives as had been done on Kodiak. This was done by occupying a Native village, enslaving and killing

men, and taking women and children as hostages for ransom. The Natives were also formed into work groups lead by Native chiefs and Russian overseers. Workers were committed to the company for a specified time and had to meet harvest quotas. The various work tasks included hunting sea otters, bird hunting, fox trapping, and gathering all manner of wild foods including dried salmon, whale meat, and edible plants (Black 1977; Davydov 1977).

Reaching Cook Inlet and Prince William Sound was a high-point in the Russian pursuit of fur in Alaska, for these were among the last strongholds of the sea otter. Excluding polar bear and arctic fox, most of the fur bearer species in Alaska were found around Cook Inlet. Sea otter were distributed north in the inlet as far as the Forelands. Beyond the shoreline of the inlet and northern Prince William Sound were the inland areas, populated with large numbers of fox, mink, marten, lynx, land otter, wolverine, beaver, muskrat, and bear. In addition, there was a human population capable of harvesting the furs. The Native people were also eager and willing traders for the goods brought by the Russians.

Sea otters were taken by various methods. Typically, they were hunted and killed with harpoons or bows and arrows. Hunters used one-hole and two-hole skin-covered bidarkas (Plate 5). Five or six bidarkas stalked the animals and finally surrounded the otters before killing them. Moonin (1985:pers. comm.) described the circle as *nanuwig* where the kayaks formed a ring inside of which the otter was kept by hunters beating their paddles on the water. When the otter surfaced it was killed with arrows. DeArmond (1969:6) reported,

In the southern part of the inlet the Natives sometimes caught the sea otter with tangle nets, but more often the animals were hunted down and killed with harpoons or bows and arrows. The hunters used light, skin-covered two-hatched and three-hatched bidarkas, and five or six bidarkas usually worked together in stalking, surrounding and finally killing the valuable animals.

The Native hunters preferred the use of spears and arrows over guns, which became available to them only in the late 1800s. Guns were not used by the Native otter hunters because the noise frightened the animals, making them harder to approach and chasing them from shoreline areas. Firearms were prohibited by law after 1867, as was the taking of otters by whites. In the later part of the Russian period, when otter populations were becoming depleted, rotational hunting rules were implemented to allow the sea otter recovery.

RUSSIAN ORTHODOX CHURCH

The Russian Orthodox church has a long history in Alaska. In 1794, the first Russian missionaries were sent to Kodiak at the request of Gregor Shelikov and Simon Golikov for instructing the Natives in Christianity (Tikhmenev 1978:35-36). The church probably had its most profound impact on Natives by providing a new set of beliefs and customs to replace many traditions destroyed by early Russian oppression. Lantis (1970:284-291) reported that in Southwestern Alaska the Russian priests tried to help the people by providing a rationale for their existence. This came as a great relief "from the labor and hazard of service for the Russians."



Plate 5. Sea Otter hunters in Kayaks. Courtesy: Anchorage Museum of History and Art.

In 1845, Monk Nicholas settled in Kenai to serve Cook Inlet and Kenai Peninsula communities. Travel to many of these communities was long and arduous, especially those on the outer Kenai Peninsula. In order to reach the people living in the communities of Aialik, Yalik, and other outer coast settlements, missionaries requested Natives living in these places to move to Alexandrovsk (Porter 1893:69).

In the 1830s John Moonin (Munin) was born in San Francisco. He was of Russian, American Indian, and Spanish ancestry. During the 1850s, Moonin and his first wife moved to Kodiak Island. After his first wife died, he married Helen Medvidnikoff whose father was Russian and mother was Aleut. Moonin and his new wife volunteered to do missionary work in Seldovia during the 1860s. He was a lay reader and paid by the Russian government to conduct the activities of the church, including services and baptisms. Having lived in Seldovia only a short time, Moonin and his wife moved to Nanwalek where they settled. One son of John and Helen Moonin was Nicholas who was born in 1874. He became an Orthodox priest and the patriarch of Nanwalek until his death in 1972.

The second orthodox church in Nanwalek, was built in the late 1890s (Plate 6) after the first one burned. Because there was no money to build a new church, the late Walter Meganack Sr.'s grandfather, Riley, traded his sea otter pelts to the ACC for its old store building on the bluff. The building was torn down and rebuilt at its current location where it served the community until in the early 1980s, when a new church was constructed. The old St. Sergius and Herman Orthodox Church is on the National Register of Historic Places. In Port Graham, the St. Herman Orthodox Church provides for Russian Orthodox followers, while a second religion, the Church of the First Born offers an option to the orthodox church.

DISEASE, SOCIAL DISRUPTION, AND DEMOGRAPHY

The diseases brought by Euro-Americans, the social disruption caused by the forced labor, the dispersal of Native communities, and creolization of the population all resulted in drastic declines of the Alu'utiq population. The forced labor of the Native hunters during otter hunting trips exposed them to storms and attacks by enemy groups. Hunters' families were left to fend for themselves in their home villages, but were unable to get adequate food and shelter and often suffered from starvation. Early explorers and fur traders brought small pox and influenza. There was no immunity among the Native people, and medical treatments were late in coming and poorly administered.

Population decline by the end of the 1800s was dramatic throughout the Alu'utiq region. An estimated 9,000 Pacific Eskimos lived in all areas in 1784, and by 1800 there were only 6,000. After the small pox epidemic in the 1830s, there were 3,000. Among the Chugach specifically, Petroff (1884:28) reported that the number of winter villages had declined from eight to four, and only about 267 people remained in 1880 of an estimated 1,000 in 1790.



Plate 6. St. Sergius and Herman Church in Nanwalek was built in the late 1890s. Courtesy: Nanwalek Traditional Council

Before the 1820s, the Russian-American Company had only ships' doctors to serve its people in Alaska. It was not until then that a full time doctor was employed, and he served only company personnel and no Natives. In 1821, small pox vaccine was supplied to the colonies. The Natives refused to receive the treatment and when a major outbreak occurred in 1837, over one-fourth of the Native population died (Tikhmenev 1939-40:Appendix II, 229).

Among the Chugach, Abercrombie (in Hassan 1978:161) reported seeing many people suffering from pulmonary disease and reported that an epidemic in 1885 killed over half the population of Nuchek. In 1884, an influenza epidemic swept the Kenai Peninsula, taking the lives of most children two years and younger as well as many older children and adults. In the late 1880s, the Alaska Commercial Company (ACC) stationed a doctor in Kenai. At least once a year, he was supposed to visit all the Native villages in his district. Some more distant places probably did not receive annual visits. At the time of the 1880 census, 32 people lived at Yalik. In 1888, the Governor of Alaska visited Prince William Sound and when in Nuchek he found that most of the people were suffering from pulmonary disease and syphilis. Although the ACC store was provided with medicine, they had no knowledge of how to properly administer it.

When the Russians decided to establish settlements in Alaska, the government did not allow Russian women to move to communities. Instead, they encouraged Russian traders to impregnate Native women in order to produce a generation of "Creoles" to oversee the fur trade (Denham 1977:24). These close relations with the Native women also allowed the traders to be forewarned of any rebellions, thereby maintaining control of the labor force necessary for the fur trade.

EARLY MINING ACTIVITIES

In 1850, mineral explorations by Peter Doroshin on the Kenai Peninsula led him to the coal deposits discovered by Portlock in 1786 at the entrance of Port Graham. A mine was established by the Russian-American Company in 1855 (Barry 1973) (Plate 7). Simeon (Anahonak) Kvasnikoff described his family's background and history relative to the coal mine.

And then, the first place they settled, right after the Russians left, they settled in Coal Mine and lived there. Michael was born there and Alga, my sister. And from there they moved over here (Port Graham) and most of us were born over here and raised up over here and then moved to English Bay, and lived there 13 years and after that moved back over here.

Over 5,000 tons of coal were exported by 1862. The community of Coal Village was to be the third largest Russian-American Company community in Alaska with about 100 people when the trading post at Alexandrovsk was moved to the site. Coal was exported to California to supply the demand created by the gold rush in 1849. However, because the coal was low grade, the mine closed when higher grade sources were found in California. At that time, the former village site at Alexandrovsk was reoccupied. Other mining activity took place on the lower Kenai Peninsula during the American period (see below).

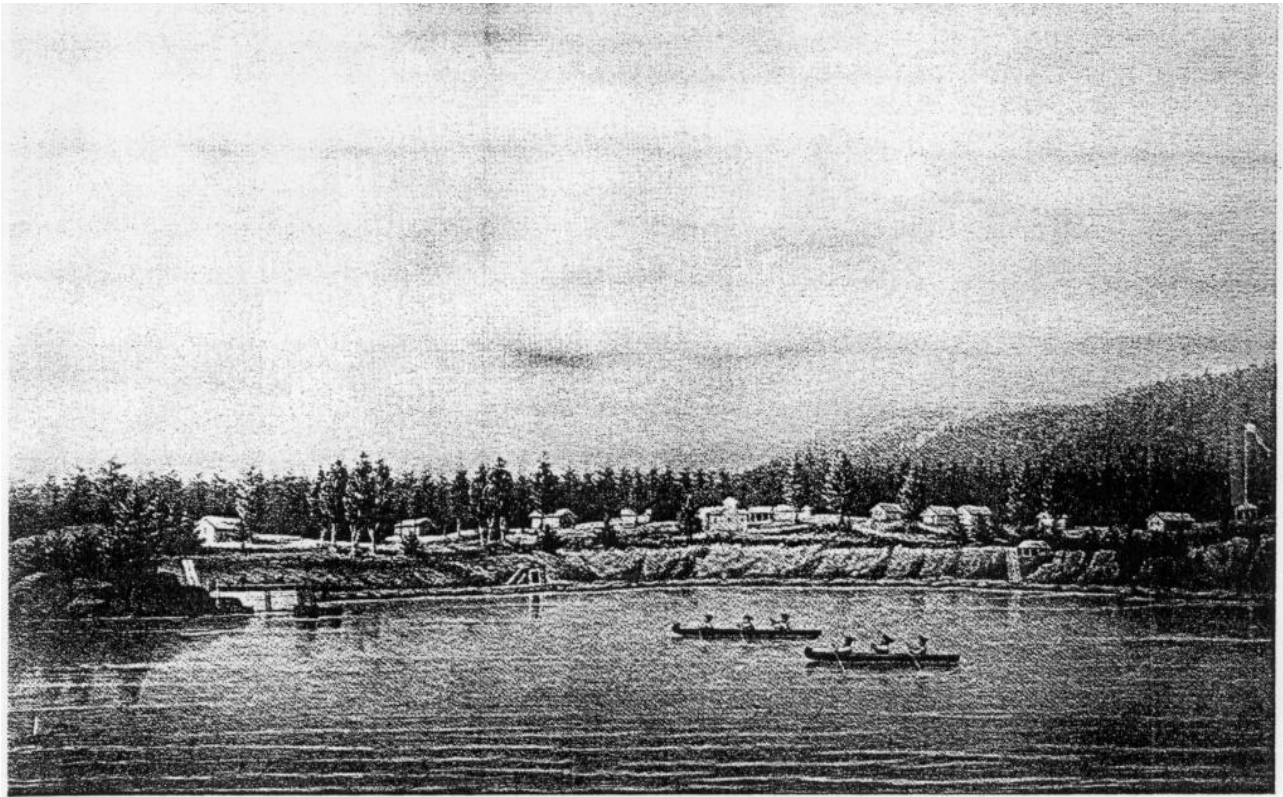


Plate 7. The Russian mine located on the northwest shore of Port Graham Bay - late 1850s
Historical Photograph Collection, Archives, University of Alaska, Fairbanks

CHAPTER IV THE EARLY AMERICAN PERIOD - 1867 to 1940s

HISTORICAL DEVELOPMENTS

In 1867, the United States purchased the territory of Alaska from Russia. The Alaska Commercial Company (ACC) took over the Russian-American Company post at Alexandrovsk (Nanwalek). The Americans, as the Russians before them, pursued the commercial exploitation of furs and minerals. The ACC continued the pattern of trading store-bought goods and supplies much as had the Russians. But the Americans removed the rotational hunting restrictions on sea otters imposed by the Russians, and the otter populations continued to decline (Bancroft 1886) until hunting was stopped by the Fur Seal Treaty Act in 1911. The economy of the lower Kenai Peninsula went through many changes during this period. Major sources of cash during specific time periods are depicted in Figure 3.

With the arrival of the Americans, the trade, barter, and subsistence economy of the Russian period became more dominated by cash. The late 1800s saw little or no government control of the economy and laws of Alaska. The Native populations were at the mercy of unscrupulous white entrepreneurs and exploiters. Large amounts of credit were extended to Native trappers in order to gain their trade (Braund and Behnke 1980:169-170). The population of white settlers grew rapidly in the Cook Inlet area as gold finds brought thousands of miners north to the gold fields around Hope, the Susitna Basin, and Interior Alaska (Barry 1973). Along with the influx of settlers came the development of new cash sources including canneries, commercial fishing, mining, forestry, and fox farming. Unfortunately, as Native residents became fishermen and cannery workers, they continued to incur large debts of credit, and their annual round of subsistence harvesting was even more disrupted.

Fur Trade

The trade in furs by the ACC included a policy of providing Natives trade goods in advance of the forthcoming fur harvests. Because competition among companies for the fur trade with Natives was allowed by the American government, extremely inflated prices were paid. This was often done in advance of the fur harvest season in order to secure Native business. Both the Russian and American fur trading operations had a profound effect on the aboriginal economy and social organization of Native communities. During the Russian period, the trade in fur created a new economy in which Natives participated and thus developed a dependence. The fur trade brought cash for the purchase of store-bought goods which drastically altered traditional subsistence patterns, as well as the foods people ate, their clothing, social relations, and settlement patterns.

DeArmond (1969:6) writes that at the beginning of the American occupation of Alaska, the Native sea otter hunters lived as they had for centuries. They resided in many small shoreline villages located in places which afforded good landings for kayaks, fresh water, and ready food supplies like clams or salmon. Over time, villagers began to congregate in fewer and larger villages, for two basic

PORT GRAHAM AND NANWALEK ECONOMIES THROUGH TIME

Period	Economic Activities
Pre-1740s	Precontact Subsistence
Late 1700s through 1860s	Mining, Timber, Trapping, Trade wild foods
1780s-1790s	Sea Otter Trade
mid-1800s	Mixed Trade/Cash Subsistence
late 1800s	Fishing Industry
1800s	Timber
1950s	Government Subsidies
1950-60s	Infrastructure Development
1971	Native Corporations
1980-90s	Grants and Special Projects

Other Economic Activities:

- 1780s-1790s:** Fur Trapping
- late 1800s:** Fox Farming
- 1920s:** Herring
- 1950s:** Tribal, Government, Roads, Elec., Share Divids.
- 1980-90s:** Village Health, Shellfish, Salmon

Figure 3. The Major Economies of the Lower Kenai Peninsula, 1740s through 1990s.

reasons. First was the Russian Orthodox Church, of which nearly all Natives were members by the time the United States bought Alaska. Churches were built in only the largest villages. Second was the trader's preference to establish posts in central locations and to not travel to smaller locations to collect furs. When trading posts were established in the larger villages they immediately attracted large numbers of people.

While hunters lived in many different locations, this tended to disperse the hunting pressure equally along the coast. As hunters moved to the larger communities, the sea otter and other wildlife in the vicinity were quickly depleted. Consequently, sea otter hunters and other trappers moved to seasonal camps during the fur harvest season. Traditionally, the sea otter was taken from early spring until late fall, although good weather permitted hunting all winter. As Tanape (page 16) stated, he and his grandfather traveled from Nanwalek to Nuka Bay for the winter months of trapping and hunting. Meganack (page 12) also mentioned his father was from Yalik village, and that after moving to Nanwalek he traveled to the outer coast during the winter months to trap fur (primarily land furs).

When sea otter numbers declined, hunters moved locations more and more frequently. This required considerable time and wasted effort making and breaking camp and cutting firewood during much of the daylight hours. Instead of living in shoreline camps, hunters began living aboard vessels. This not only freed the hunters from the chores of camp life, it also allowed them to travel farther offshore to hunt sea otters in deeper waters (DeArmond 1969:7). When one hunting area became depleted, hunters were able to quickly move to a new area. Meganack (1981) mentioned his father was a young hunter aboard a "Russian" vessel. This occurred either at the end of the Russian period, or there were Russian speaking creole managers working for the new American companies aboard the vessels.

My dad hunted sea otters from (a) Russian schooner. He was just a kid, just a sailor on the Russian schooner. They didn't pay them, they just fed them and took care of them. They took him to the hunting grounds. So they took his kayak and turned him loose.

The American fur trade continued to affect social composition of the local Native populations much as during Russian times by bringing in Native hunters from other areas. DeArmond (1969: 32-33) cites notes from the ACC diary at Nanwalek in 1877 which reported a group of "Nuchek Indians" arrived there to hunt sea otter. Similarly, at the Seldovia ACC station in 1895 there are reports of the schooner Mary E. Anderson bringing hunting parties from Kodiak Island to hunt in Cook Inlet. As noted earlier, the Unegkurmiut intermarried with the different groups of fur traders and hunters who accompanied the Russians.

The ACC took over the Russian post and buildings in Nanwalek previously owned by Tittel and Co. of San Francisco in the 1870s. The English Bay ACC station served a wide area as evidenced by entries in the journal of Frank Lowell who was the first American known to have settled at Seward. He mentioned having traded with the ACC at English Bay while he was sea otter hunting. The English Bay ACC agent (Cohen) also had entries noting the arrival of otter hunters as in June 1877 when, "8 bydarkas of Nuchek Indians to hunt otter" arrived.

DeArmond (1969:33) describes the primary sea otter hunting areas as follows:

The Native otter hunters who traded at English Bay favored three principal hunting areas: Up the eastern shore of Cook Inlet to Anchor Point and beyond; southward and eastward around Kenai Peninsula at least as far as Nuka Bay; and across the inlet to what the station log called "Chonoborough" Island. It is known as Augustine Island. Otter hunting schooners and hunting parties passed back and forth between the station and 'Chonoborough' with some frequency...

An account from the log of the *Albatross* (O.F.C Rpt. 92: 86-87) which visited lower Cook Inlet in the winter of 1892 after arriving from Kodiak and anchoring in Port Graham, provides a description of local conditions. A few words are missing from the water-damaged log.

Steaming ahead at early daylight against a fresh breeze. Reached the land-locked harbor of Port Graham at 11:26. The entrance is narrow, tortuous, and, to a stranger, dangerous. Once inside, ample room and perfect protection will be (found).

Fort Alexander, as the Aleut village here is called (Plate 8), is an exposed point near the southern approach to the bay. (It) contains a population of 120 souls, all Aleuts except (for Mr.) Cohen, Agent of the Alaska Commercial Company. The _____ the country was covered with snow which buried (the houses of) the natives nearly to the eaves (Plate 9). The past winter (was the most) severe that has been known for many years, and _____ evidences of approaching spring at the time of our (departure).

The unusual winter's hunting was almost entirely (unsuccessful due to bad) weather and the people were very poor in (every way.)

Mr. Cohen came on board soon after the _____ being informed of our mission, rendered valuable (assistance in getting) the native hunters together and acting as (interpreter) _____ experience of twenty-two years in the territory, _____ trade, gave special value to his statements _____ance with the people and their language made (communications) comparatively simple.

Affidavits relating to seal life were provided _____ and all of the native hunters, and at 2:45 p.m. _____ the "Albatross" left the commodious harbor of Port Graham and anchored two hours later in Chesleknu or Seldovoi Bay.

The collapse of the fur market in 1897 brought fur prices plummeting. Throughout the competitive beginnings of the American fur trade, fur prices became extremely inflated and buyers had extended large amounts of credit to the Native trappers. The large debts could not be repaid with the low value of furs and this caused tremendous social disorder. In addition, by the early 1900s the sea otter had almost disappeared from Cook Inlet. There was still a considerable trade in land furs; however, even these were on the decline.

The English Bay ACC station apparently ran until about November 1898, because in that year the ACC only bought licenses for stations on Kodiak. In January, the ACC directors in San Francisco approved the sale of company property at Port` Graham to the Alaska Coast Company, a transportation company which ran a line of steamers. The role of old trading posts was slowly taken over by general merchandise stores. Traveling fur buyers and mail-order fur houses eventually took over most of the fur trade. The fur industry in the lower inlet made one last stand in fox farming.

Fox Farming

The following information is found in DeArmond (1969:63-64). In the American period, fox farming had its beginnings around Cook Inlet in the 1890s and expanded greatly in the early 1900s.



The Plate 8. Nanwalek in 1892. Source: National Archives, Washington D.C., Albatross Collection

Russians had made some small attempts at planting blue and varieties of red foxes on islands. More serious fox farming around Cook Inlet began in 1894 with E. Petellin's planting of 18 pairs of blue foxes on Perl Island. In 1898 he reported having about 400 foxes on the island. The other islands of the Chugach group, East Chugach and Elizabeth, were stocked with foxes in 1900 by A.C. Goss and M.F. Wright. The fox farm on Elizabeth Island was run by Jim Collias in the 1920s. Another on Perl Island operated during the same time. None of the fox farm owners were local Natives.

At Port Graham bay, Passage Island was stocked by John A. Herbert of Seldovia. The 1918 Bureau of Sport Fisheries report (Bower 1919) noted that:

This farm was established several years ago and has been fairly successful. At the beginning of 1919 the stock consisted of 25 pairs. These produced about 100 pups, but heavy losses occurred, as approximately 80 percent of the young were killed and carried away by eagles.

Residents of Port Graham, Nanwalek, and neighboring villages worked for the farms harvesting food for the foxes including marine mammals and fish. They also assisted in building fox pens and other facilities, feeding and raising the foxes, and in skinning to get the pelts ready for market. M. Moonin (1982:16-18) tells of the Passage Island fox farm.

Around 1910 and into the 1920s, a fox farm was established out on Passage Island. The owner was John Herbert. Some of the people who helped Herbert were Demetri Moonin, Gabriel Kanaback, Peter Moonin, Gorman Agenia and sometimes Mike Moonin. Help came from both English Bay and Port Graham.

The foxes ate mostly fish and porcupine which were sold to the owner. Someone had to cook the fox food. A fifty gallon oil drum was cut in half and used as a pot to cook the fish trash. The foxes ran loose around the island until the females were ready to have pups. Then Herbert would pen them up in little houses he had built. If allowed to run loose, the mothers would dig holes for dens to have the pups in.

After John Herbert retired, a man brought some live mink and started a mink ranch out on the island. He had the same helpers to work with him skinning the mink. In November and December the mink were skinned and readied to sell. In those years the mink pelts were worth about eight dollars for a pretty good one. The pelts graded like A and such.

The mink ate fish and seafood like clams, cockles and bidarkies. Pens, about four feet long and two feet square, were built of wire mesh. There was a little cubbyhole so the mink could get inside the pen.

Mr. and Mrs. Bob Smith were owners of the mink ranch at one time. Mrs. Smith also taught school in Port Graham and Mr. Smith worked as janitor. When the Smiths left, they killed all the mink and sold all the stuff.

A fox farm was established on Nuka Island in the 1920s by the Hunter family (McMahan and Holmes 1987:34). Several Port Graham and Nanwalek residents (Carlough 1997:pers. comm.) worked at the farm for the Sather family.

Mining and Minerals

In the American period, mining on the lower Kenai Peninsula played a small role in the lives of Port Graham and Nanwalek residents owing to the short-lived history of this activity in the area. One of

the two chromite mines on the Kenai Peninsula was located at Claim Point on the Pacific Ocean coast at Port Chatham (Barry 1973:179), a claim staked in the early 1900s by William and Charles Anderson. The mine was sold to the Whitney and Lass company. Several thousand tons of ore were removed, which was in high demand during World War I. After the war, chrome prices dropped and the mine closed.

A few Port Graham and Nanwalek residents worked seasonally in different mining operations around the lower inlet. Moonin (1981:16) mentions working in mining operations near Bluff Point, Seldovia, and Portlock:

During the war (World War II), that was right after I got married, 1941 or 1942, I remember I worked in the mine down below (Port Chatham). A coal mine it was. The next mine was above Seldovia (Red Mountain).

Although gold was discovered on Nuka Island around 1913, there were no accounts of Port Graham and Nanwalek residents' involvement in those mining operations.

Commercial Fishing

Just as the fur trade was winding down in lower Cook Inlet, the commercial fishing industry had its beginnings in the late 1800s. The greatest influence of the American takeover of Alaska was on the local economies in the 1880s through the development of (salteries), canneries and the commercial fishing industry (Scudder 1970:3). The first cannery, a hand packing operation, in Cook Inlet was located at on the Kasiloff River in 1882, where a saltery had earlier been located in 1879 by the Western Fur and Trading Company. Salteries were built at AC Point in Port Graham, Portlock, and Seldovia. In 1883, the Alaska Commercial Company operated a saltery at its AC Point trading post along the southern shoreline of Port Graham bay (Plate 9). DeArmond (1969:8) cites an entry from the English Bay Station log book on May 27, 1883 indicating the arrival of the schooner Kodiak loaded with barrels and salt. Further log entries later in the summer indicate shipments of salt fish being sent to Kodiak Island, and more barrels and salt arriving.

In Kachemak Bay, canneries began in 1911 at Seldovia (Klein 1981:54). The community of Port Graham was founded well into the American period when a cannery was built by the Fidalgo Island Packing Company in 1912 (Plate 10). This became one of the most stable canneries on the inlet. Oral history (W. Meganack Sr. 1983:pers. comm.) indicates that at the turn of the century, families living at English Bay maintained camps along the Port Graham shoreline and that barabaras were located on the gravel spit south of the cannery. In 1897 the first settlement was established, and most original residents came from Koyuktolik (Dogfish) Bay in an effort to be closer to the church at Nanwalek (E. McMullen 1997:tape trans.). Meganack (1981:24) also indicated that ancestors of its present day residents settled the area, known as Paluwik (a sad place) in the late 1800s and very early 1900s.

I heard my father say that Paul Ofkew was the first one to settle in Port Graham. He had a barabara at the site of where the cannery is now.

In 1912, my dad, Affanasia, and my older half-brother-in-law Nick Mumchuck moved here to Port Graham. They were the first people to move here to build cabins and settle. Tim Ukatish, Dick Anahonak, Ephim Moonin, Demetri Moonin and Alex Anahonak moved across the bay where Willie Moonin lives to build cabins. Later on between 1914 and 1920, they decided to join the rest of us on this side of the bay.



Plate 9. AC Point where the Alaska Commercial Company operated a saltery in the 1880s.



Plate 10. Port Graham Cannery, 1910s. Alaska Historical Library Photo

After the cannery was built in 1912, English Bay residents worked seasonally at the cannery, walking the 3.5 miles to and from work each day. Some people built temporary living structures in the surrounding area. In the 1910s, a row of frame houses was built on pilings along the gravel beach west of the cannery (Plate 11). McMullen (1997:tape trans.) noted Nanwalek residents' movement to work at the cannery.

The people worked in the cannery. Lots of seasonal work. The cannery provided housing along the shoreline for the people. For the people that were brought in from Nanwalek, they provided temporary housing. They built a wooden frame and then put a tent over it and provided stoves for those people.

These structures served as worker housing until the cannery grew and larger crew quarters were built. In the 1940s, the frame houses were sold to individuals who moved them to higher ground south of the cannery (Meganack 1989:pers. comm.). Several of these houses served as stores. Phillip Anahonak's former house was a store and local gathering place for dances, card games, and pool. The house next to Carl Mumchuck's home was the cannery manager's house, and for many years, the location of the village two-way radio.

When the cannery was built at Port Graham, salmon traps were the primary means of harvesting salmon. Prior to the fishing season, logs to be used as trap pilings were cut at Windy Bay, Port Chatham, and Dogfish Bay. Village workers traveled to these locations to cut the pilings and other lumber used in construction. Traps were constructed at key coastal locations where salmon passed through narrows or around points of land. Flat Islands, Seldovia, and Bluff Point were trap locations where many Nanwalek and Port Graham residents worked as attendants. Traps had to be guarded against robbers who stole fish, and seals and sea lions which ate the fish and tore netting.

In addition to salmon, herring were an important product in the early years of the fishing industry. DeArmond (1969:55) reported that World War I marked a major push to increase the production of salted herring because shipments of herring and other foods from Europe to the United States were cut off. In Cook Inlet, Halibut Cove and Seldovia, which means herring in Russian, were the hubs of the herring pack. Herring packs, at the time were done near the harvest sites, were also made at other locations around the lower inlet including Port Graham. Harvesting was done with gill nets, which allowed for selecting an even-sized, large fish. The fishery took place in the fall and winter and thereby provided employment during a time when there was no salmon fishery. It was also very easy to get involved



Plate 11. Port Graham Cannery 1940s. Courtesy: Jim and Susan LaBelle

fishing, and salting and packing the catch in barrels. By 1929 the large herring populations in the lower inlet were over-exploited, removing a major part of the local economy.

In 1920, several new canneries opened on Cook Inlet. One of these was built at English Bay by the Arctic Packing Company. This company put up 200 cases of salmon in its first year, and was the first to can king crab, then known as "spider crab."

Like the fur trade, the fishing industry was subject to periods of abundance and shortages. Villagers earned large sums of money during the good years, while large debts were accumulated at the canneries in poor times. Because most Natives were unable to afford large fishing boats and gear in the early years of commercial fishing, they could participate in only a small way. Their jobs typically were, at best, as cannery workers, salmon trap attendants, and setnet fishers. In addition, cannery work required people to be present for an entire season in the middle of the months when they would usually be gathering and preserving wild resources for their winter food supply. Many could not keep a whole season's commitment and stopped work part way through the season. Thus, canneries probably had their most profound affect on Native people by disrupting the annual seasonal round. This disruption came at a crucial time when, traditionally, Nanwalek residents were putting up their winter supply of salmon (Davis 1977:8). Consequently, most cannery workers were brought to the community by the packing companies; they were of a variety of ethnic backgrounds, including Chinese, Filipinos, Mexicans, Puerto Ricans, and Japanese.

It was not until after World War II that villagers could afford to lease or buy commercial fishing boats and gear. McMullen (1997:op cit.) recalled that in the 1950s:

Our men learned to fish commercially. The cannery had boats (Plate 12) that they leased for the season, and they went drifting up the inlet. Later on they started seining - they called them the PG boats. They were steel boats.

The economics of the community changed over time. From fish traps to when our people went out drifting and set netting. They were familiar with the areas because of fish traps being located in the inlet and various parts of Kachemak Bay. That part of it wasn't new to them. Just the ability to go out and stay for long periods of time. It was a festive time of our lives when our men went out fishing. We all went down to the dock or beach and saw them off. Women would send their husbands off and regardless of the time of day or night we were all down there to meet them.

Many of us went to work in the cannery at a very young age. I was 11 years old when I went to work. David Swenson, Tim Malchoff, and I were hired at the cannery. It was a year when there was large salmon pack. We had fish coming from everywhere into the cannery, and they liked to process the salmon immediately. But they didn't have anybody to put the cans into the boxes, to pack them. So that's what we did.

My grandmother was an elderly lady then, and she and AgraFinia were hired to wash the (new) cans and check them for leaks. The boys made the boxes, and a couple other kids - from Nanwalek - put the cans into boxes by hand. We'd case up piles and piles of boxes of salmon. Then when I was 13, I was hired to work in the cannery around machinery. That following season I was told that only 16 year olds could, were allowed to



Port Graham, ca. 1950. Old cannery
photo by Feona Sawden
courtesy of Feona Sawden

Plate 12. PG Boats on the ways at the Port Graham Cannery, 1950s.

do that, because they didn't have the people to do the work. I remember I earned a whole \$59.00 that year when I worked in the cannery, so I must not have been paid very much, although I was extremely happy that I got that much money - I bought a lot of things with it.

While commercial fishing and canneries had many positive impacts on the community, McMullen (op. cit.) describes some of the negative consequences including the introduction of alcohol and drugs, separation of families, and unethical behaviors which accompanied the influx of outsiders.

It was a real different lifestyle. It was an accepted way of life. The people from Nanwalek would come up here and bring their entire families to work in the cannery. And then their husbands would work on the fish traps and be gone all summer. They started real early in the spring and then left late in the fall. The impact (of this) - I would notice as child a big change in the community, the dynamics of the community when the non-native, cannery people arrived. There was completely different - there was a lot of alcohol use that never used to happen during the winter months, that would occur then when those men came - they seemed to introduce a lot of that into the village, and then there was some relationships established that I thought were very inappropriate because most of those people were married and it was always an inappropriate behavior.

In addition, while the commercial fishing industry replaced the cash source lost in the collapsed fur trade, the more aggressive Euro-American fishermen greatly overexploited the salmon populations. This not only resulted in a downturn in the fishing industry, it also took away from the amount of salmon available to subsistence fishermen (Braund and Behnke 1980:172).

World War II

Very little is reported in the literature about the impact of World War II on Port Graham and Nanwalek. However as McMullen (1997:op cit.) explains, there were often subtle impacts on individuals' lives.

I remember one other thing that impacted our community was the time of the military services of some of our men. It was like a time in our lives when, to use my brother Marvin as an example he was drafted into the military. I remember Murphy Meganack, he was in Germany during the war, and when he came back how changed he was and how different he was. He served over there, he was one of the liberators in the liberating group that liberated the Jewish people from the death camps. And he came back a completely, totally different person than he was when he left here. I also thought it changed the men's values on their families and on their, the community itself to some degree. I was a child then and trying to understand the whole thing was difficult. I remember small groups of people getting and talking about it and how they tried to sort it out. And it was real difficult. One of the men from our village, Ralph Ukatish was really a quiet man, that never shared much about himself, but he served in the special forces. He was taken to Nome with the Native Special Forces and by ship they went to Atka and Attu where the Japanese had invaded America. They fought the Japanese there. He kept it quiet and I don't think this community ever at any time appreciated the capabilities of this man, nor of his past history of serving the United States in the special forces.

He was impacted and changed by what happened. I remember him sharing with me how it was emotionally difficult sometimes when he came back to adjust back to the life of a small village. Even as small as we are how he sometimes had to deal with the things he saw in the service. Then to come back and to deal with it himself.

During the war, Nanwalek and Port Graham residents were often on the alert for enemy submarines and warnings of potential attacks. They were frequently required to keep dark-out conditions so as not to reveal the village location at night. Throughout the war, however, there never was an actual threat by enemy forces.

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ETHNICITY, POPULATION TRENDS, EMIGRATION, AND IMMIGRATION

In 1883, Jacobsen (1977) visited a number of villages in Cook Inlet. Among these were Seldovia (Ostrovski) where he reported a population of 38 Creoles and 36 Eskimos. He also visited Fort Alexander (Alexandrovsk or Nanwalek) where he found the population to be 75 Eskimos, 12 Creoles, and 1 white. Jacobsen reported that the primary economic activity was sea otter hunting. Table 1 provides population information for lower Cook Inlet villages since the 1880 census.

The decline of permanent outer coast villages after the acquisition of Alaska by the United States in 1867 was caused by several factors. In addition to depopulation resulting from disease, there were increasing economic and trade opportunities at Nanwalek. Pressures from the Russian Orthodox church for village consolidation, and educational opportunities, also led to a shift of the population to the west. While the permanent use of outer coast villages ceased, seasonal use of the former villages and camps continued. By the 1930s no outer coast settlements were reported to be used throughout the year.

The influx of different ethnic groups into Port Graham during the cannery season greatly changed the composition of the community during the summer months. However, relatively few outsiders stayed and established themselves. Nanwalek remained more isolated from the disruption and integration brought by the cannery than did Port Graham. To this day, a more traditional way of life and greater retention of the \Alu'utiq language persist in Nanwalek.

POLITICAL AND SOCIAL ORGANIZATION

The current political organization of Nanwalek and Port Graham had its beginnings during this early American period. By 1867, Nanwalek had been in existence for more than eighty years. Early control of local political issues was with the Russian trading company. As the community became more permanently established, leadership began to follow traditional Native patterns with the inclusion of church leaders.

Davis (1987:9-19) discusses the development of political organization in Nanwalek. Throughout the early 1900s, a two-chief system persisted. The 1915 governing body was represented by Ephim Moonin, Chief of the Tribe, Dimitri Yokootish, Assistant Chief, and Nicholas Moonin who was the second priest. Port Graham was governed by individuals who had the appropriate abilities and means to lead in issues affecting the community. The people developed their own rules to regulate hunting areas, inheritance, domestic relations, and personal conduct. Port Graham followed the two-chief system until 1961 when a traditional council president was elected. Father Nicholas Moonin was the last traditional chief in Nanwalek. Individuals who filled leadership roles were groomed by former leaders. Usually a

male who was similarly situated socially and philosophically as the leader was encouraged in their early adulthood to follow the teachings of an elder leader. The role of women in the social organization did not allow them to become leaders until societal values changes in the 1970s and 1980s. According to McMullen (1995) women were not regarded very highly for community leadership roles.

SOCIAL ORGANIZATION

The primary social unit in the early American period at Nanwalek and Port Graham was the extended family. As mentioned earlier in this section, extended family units established themselves at different locations around Port Graham Bay. McMullen (1997:pers. comm.) notes that her grandparents, her mother, and other family members moved from Dogfish Bay to a location west of where the school is today. At this site they built a barabara, smokehouse, caches, and eventually a frame house. Settlement in the community usually focused around extended family units with young adults leaving the household and building near their parents. This practice lasted into the 1960s, until surveyed home sites and the availability of land precluded building in proximity to other family members.

Marriage

At the turn of the century and into the early 1900s, marriages between men and women were arranged by parents and elder family members. The process of preparing a girl for marriage took place throughout childhood in the form of play, listening to elders' stories, and following the teachings of the mother, aunt, and grandmother. The intensity of the process changed dramatically once the girl reached menses. At this time, the entire community became aware of preparations being made for a marriage, although the entire matter was kept very quiet and private. Elders in the community visited the parents of the girl to inform them of how the girl should be taught and what needed to be done to prepare her for marriage. Women would also go to the home of the girl and teach her different things she needed to do to prepare for marriage, childbirth, and managing a home.

When a young girl became of age, somewhere around 11 years old, and started having her menses, the mother immediately built within the home, whether it was a barabara or a more permanent home, a special shelter for her. The young lady was instructed that she couldn't leave the shelter for 40 days. There was no light in the shelter, it was just a place for her to lay down and sleep. Her body wastes were handled and cared for by either the mother, grandmother, or aunt. These were placed in a container and disposed of in special places where no one would be walking and where animals would not disturb them.

The girl was instructed during this time in her role as a woman. She was told that she couldn't go out on the beach when she was released from there after the 40 days. That she would disturb how the earth provided from the waters, the food supplies people collected off the shore. She was not allowed to holler and make lots of noises or she would disturb the wildlife around (the area). If she caused a disturbance, hunters could not go out and get a bear or birds of other animals. She was not allowed to spit on the ground because the waste from her mouth would disturb the land and if there was a hunter in

the her family, he would be disgraced. The seclusion and restrictions of activities lasted up until the time of the girl's marriage. Shortly after her marriage was arranged, she became part of the community. She usually had children, but during the times of her menstrual period, from then on she was restricted on what she could do. She could prepare wild foods but she couldn't ingest it (swallow it). Usually it was with the blessing of the elder of the family, usually the grandfather. While the young woman was isolated, there was very little she could eat. She could not eat any game, although she could eat some birds, usually small birds, and fish but she couldn't collect fish. She could not eat seal or bear.

Marriages were always prearranged, and the young married woman did not necessarily immediately move in to live with her husband. Sometimes she lived at her parents home and she was instructed at home with a parent on how to prepare for providing for her husband. Husbands were selected based on who was the best hunter, who could produce the most, how well they could carry on reproduction, and who was the strongest physically. When women were required to remain in her parent's home, there often grew a lot of resentment between the family of the woman and the husband. Apparently, the woman was sometimes kept at home in order the parents be provided for by the husband. Marriages continued to be prearranged in Port Graham and Nanwalek until the late 1940s and early 1950s.

The power of the female body was of paramount importance relative to the lives of everyone in the community. It brought new life into the community, and a significant amount of power was derived from the woman's ability to influence human interactions with wild animals, particularly in hunting. In one instance, the power of a woman's body was able to save an entire community at Nuka Bay. McMullen (1995) tells the story as follows:

There was this story I was told of this family that lived down around Nuka Island someplace. It wasn't really on Nuka Island but someplace around there. It was a family, a group of people. And this young lady became of age and started her periods, and there were about four hunters from that family out at sea hunting, and they became entangled in a large animal from the ocean and that animal was threatening their community, their living and the area where they lived. They didn't call it an octopus but when they described it that was my vision of it. And so the leader, the grandfather of the group there came to the village and asked the mother to collect the body secretions of this young girl, of her menstrual period, place it on this piece of animal hide so he can place it on a spear, rub it on the end of the spear and they went out and killed the large animal that had caused a lot of death and destruction to other hunters within that group. And it freed the village then to be able to continue living there and living the lifestyle that they had done hunting all the time. Otherwise they thought like if they hadn't done that this creature wouldn't allow them to even live during that time. They felt the power of the young lady and her body fluids was so strong it warded off and saved this whole family, a large family with grandparents and aunts and uncles.

In traditional Alu'utiq society, social values and rules were passed on to young people through story telling by the elders. Typically, as stories were told, listeners were required to remain quiet until the story was finished. If they were not quiet, the person telling the story might have a short life. Children could later talk to elders who would clarify and confirm what the story told.

Enculturation of Children

In the American period, and especially after 1900, two institutions, schools and canneries, brought significant changes to both Port Graham and Nanwalek. Although Euro-Americans had been present in both communities for some time, with canneries came people who were more critical of Native language and customs. McMullen (1997:tape trans.) indicates that pressure from outsiders often had dire consequences on Native youth.

My father worked on a crew of men that put together the webbing and wires for the fish traps, down at the cannery. My mother sent me down to the cannery store to get some foodstuffs, and I remember the manager of the cannery belittling Larry Meganack. I remember him calling him names I never heard our people called. The man (Larry) just stood there, he had made a mistake or misunderstood, and he was put down for what he did wrong. Rather than show him again, he (the manager) just belittled him; and how it made me feel. It was my first exposure, to me when I think about it, it was a lot of discrimination against the Native person. He was very talented in what he did and he had somehow made a mistake, and my father standing up for him, my father was a white man. And my father approaching these people and telling them to leave this man alone and he would get it done appropriately. It was not a good feeling from then on as a child, and I really felt like there was a real big difference because of the color of our skin. And how we were viewed in this village by those people that came in and were involved in the fisheries, in the salmon cannery.

Commercial fishing and canneries also brought in new people who accepted the Natives' way of life, and introduced customs and items readily accepted by the villagers. As McMullen recalled,

My father [a white man] (Plate 13) worked with a lot of our people in the cannery; he lived here from the time he was 19 years old. He and my mother were married for 52 years when he died. He spoke the language, he ate the food that we ate here. Holidays, if somebody had dinners at their homes, it was always with the food that they had available here, it wasn't with food that was purchased anywhere. The only thing that was extraordinary was my aunt Stephanita's vanilla cake. She whipped it up from scratch, and she knew that recipe and that was the most wonderful thing you could ever get your teeth into. There was a lot of pies which were made with dried fruit, apples, peaches and raisins, it was mostly raisins and apples that the pies were made from. Breads were made, I remember my grandfather making regular bread dough.

It introduced us kids to different things. I remember some of the younger men in the cannery teaching us basketball and volleyball. We never knew anything about these things. We knew Aleut baseball, we taught them that. They tried to teach us the regular baseball. We would never ever accept that as part of our sports activity - we would always prefer Aleut baseball. The other we liked was volleyball. And that's what us kids did all summer long.

As discussed by Braund and Behnke (1980:177), in the early 1900s, school administrations and their teachers in Alaska enacted highly ethnocentric policies toward Native peoples, pressuring them to abandon Native culture. The most severe policy was to forbid children from speaking their Native language and requiring them to speak English only. In reality, children spoke English at school and Alu'utiq at home. W. Meganack Sr. (1981:26-27) tells of his experience with school education.

I didn't have a chance to go to school until I was at the age of fifteen. There was a school in Port Chatham open early.

My dad was at the age where he needed my help. He didn't want me to leave him. He didn't want me to move to Port Chatham. So finally, sometime in 1932, Nils Swedlund



Plate 13. Harry Norman holds a large king salmon on the beach at Port Graham. From left to right: unknown girl, Jimmy-the-Greek, Harry Norman, Doris Ukatish, and Vera Meganack

married a school teacher in Seattle somewhere. They opened a school here. I was at the age of fifteen when they opened it. It happened we used Jesse Carlough's log cabin. We had one big room.

I spoke Aleut most of the time. I learned to speak English. I could understand early, but broken English mostly. I learned the alphabet and numbers early before I went to school. I was mixed up when to say yes and when to say no. It's foreign to me. White man language was foreign to me. My language was foreign to white men also. When I spoke to him in Aleut, he looked at me like I was going to kill him or something. Everybody spoke Aleut. Nobody spoke English.

W. Meganack Sr. attended only to the 4th and 5th grades, when he became "too old" and there were many younger people who filled up the school. Attempts were made to open a night school, but the teachers were too busy with the day-time school. Despite his lack of formal education, Meganack was quick to learn by experience and took the lead in many endeavors. In 1934, the BIA took over the schools and made several failed attempts to organize the community political system (Plate 14).

M. Malchoff (1997:pers. comm.) explained that when she grew up in the 1950s and 1960s, children were ridiculed by the school teachers, cannery people, and doctors for eating fish heads, backbones, salmon tips, seal, and other Native foods. Their parents forced them to go outside or in the back of the house to eat their dryfish when the non-Natives came around. Today, village people are more open about the traditional things they do.

Braund (op. cit.) concluded that the constant pressure from non-Native culture at this time had several effects on the Alu'utiq people. They became timid and shameful because they had been led to think that their traditions were inferior to those of the dominant society. In Port Graham, the Native people learned to live around the whites by learning their ways and how to deal with them. However, Nanwalek residents remained somewhat isolated because they lived most of the year without the influence of whites. They continued to value their traditional culture through the teachings of their elders.



Plate 14. Photo of 1939 Port Graham school class. Courtesy: Jim and Susan Labelle

HEALTH CARE

By the end of the 1940s, most modern facilities and services had not reached the villages. Solutions to health problems were those passed down through the generations by the elderly to people with special talents and skills learned from their elders. Everyone might have certain basic skills for treating wounds, colds, aches, and pains, the common things, but there were those people who had special abilities with the hands and knowledge of the best treatments. McMullen (1997:tape trans.) describes the birthing process in the 1930s and the skills of her grandmother:

(My grandmother), she was a healer. She used her hands to do lots of healing. Her name was Anesia, and she originally came from Prince William Sound. When she was growing and after she married, and many times because of their nomadic way of life she was alone when she would deliver babies. And she would deliver her own babies. In the middle of the *ciqluq* (smokehouse) she said she would string a rope for her to pull on when the strain of going into labor. She dug out a little hole in the ground of the floor of the *ciqluq*, she always had dry moss that she had put away. She lined that (the hole) with dry moss and grass. Grass on the bottom and moss over it. She would squat over the opening that she just made in the ground and when her baby came then it would fall onto something soft. The fluids that came with the baby would go to the bottom so the baby was always kept dry.

She was a midwife and attended women and provided health care for them from the time she would discover they were pregnant until they delivered. A lot of her midwifery was not much different from what we do now. Other than we have stethoscopes. She would always go by her hands and feel of her hands to determine the size of the baby and the position of the baby and when it may possibly be here. And when there were twins involved it was always a big unknown until the baby was born, there was no way of her knowing that there were twins there.

She did lots of healing. There are lots of people here that she healed and worked (on) with her hands. She used herbs, and she used her hands - heat, herbs, and hands. I like to think that maybe someday that some of us are still doing that and using some of those things that we learned. We tend to become westernized and forget those wonderful other ways of healing that we have. There was a lot of rubbing and time spent in contact with each other. I think those were our important things that we don't do. Touching each other and rubbing, and bathing together in the steam bath. And there was a lot of time spent together having tea together. Many times I remember when they were having tea at my mom's house or grandma's house, they would be speaking in hushed tones. We never were allowed to hear some of it, and weren't allowed to participate. After the tea was done, us kids could have left-overs. And we could hardly wait for that to happen, it was wonderful.

And also another time when lots of tea was had and *tumuq* (dryfish) was eaten was after *maqe* (banya). I remember my *uma* (grandma) would scrub us all in the banya.

Much of traditional health care was based on keeping the body in good condition by being active and not lying around getting lazy. By doing the necessary work of the day like chopping wood, rowing out in the bay to go fishing or to a neighboring village, cleaning house, washing clothes, and carrying water. These were things that not only needed to be done to support life, but also served to keep a person's body and mind healthy and happy.

Maintaining a healthy diet was a critical factor in good health. By virtue of the nutritional content of wild foods people gathered, good health was a natural result. Good health was compromised when foods with poor nutritional content became available in local stores. Many of these foods did not agree with traditional tastes or food preparation practices.

Finally, maintaining healthy social values and practices were essential for one's own mental and spiritual well being. By helping those who were needy, caring for elders, assisting relatives and friends, and being part of community support activities, a person's life could be fulfilling and meet the expectations of everyone in the community.

ORGANIZATION OF THE LOCAL ECONOMY

THE CASH SECTOR

During this early American period, the cash sector of the economy assumed greater importance over the barter and exchange mode that had been prevalent during the Russian and early American periods. Several types of commercial enterprises were sources of cash income in Nanwalek. Some small amounts of cash were exchanged during the fur trade era, but the primary mode of exchange was for goods and services. Furs were brought to the company stores and traded for supplies of food staples such as tea, coffee, sugar, salt, flour, and dry goods such as clothing, beads, china, and cloth.

Cash became the primary medium of exchange as the fishing industry gained the dominant role in Nanwalek and Port Graham economies. Within the fishing industry, hourly wage employment was a common way of earning cash, while selling fish to the cannery, for lump sum payments or credit, was another method. Estimates of household and community income for Port Graham during the period 1943 through 1951 were made by Alaska Native Service teachers (Bureau of Indian Affairs 1943-1965; Appendix II). Sources of income during 1943 reported by Ruby J. Magee included the following earned income categories: raw furs and hides - \$310.00 net; agriculture - \$105.00 net; wages from employers other than the Indian Service (cannery work) - \$18,108.00; other wages \$465.00; other income \$200.00; and the value of subsistence foods - \$1,255.00, for a total earned income of \$20,443.00. Other income from unearned sources included \$300.00 from Service men's dependents allotments, and \$425.00 from Indian Service relief or other welfare agencies. The total annual "individual" income for only Natives living in the community was \$21,162.00 or about \$230.00 per capita.

Interestingly, in addition to the cash income earned and net cash value estimates for products like furs sold, a cash value was placed on subsistence foods harvested. For example, in the 1943 estimates, values for the following items were listed: 750 pounds of game animals, deer, caribou, waterfowl, etc. valued at \$150.00 (20 cents per pound); 700 pounds of moose valued at \$150.00 (21 cents per pound); 216 pounds of seal meat valued at \$54.00 (25 cents per pound); 24 dozen eggs of native wild birds valued at \$10.00 (42 cents per dozen); 10 gallons of seal oil valued at \$6.00 (60 cents per gallon); 3,800 pounds of fish valued at \$800.00 (21 cents per pound); 2,000 pounds of clams and crab valued at \$175.00 (9 cents per pound). The gross income from native products was \$1,355.00, and the estimated expenses were \$100.00 for a net income from native products of \$1,255.00.

Table 2 shows the changes in Port Graham community income for the nine years 1943 and 1951. By 1951 the Native population had increased by 20 persons to 112. The annual village income was estimated at \$57,550.00 (\$513.00 per capita) and included: \$11,150.00 gross value of Native food products; \$25.00 of agricultural products; \$175.00 of wages from the Native Service; \$40,000.00 fish (salmon) sold; and \$5,900.00 from social security and other unearned income.

The Native Service gave considerable attention to the agricultural or home garden effort in both Port Graham and Nanwalek by making annual surveys of garden activity and starting 4-H clubs (Plate 15).

Table 2. Estimated Total Annual Income and Value of Resource Harvests
Port Graham, 1943 - 1951.

Year	Value of Native Foods Produced	Value of Raw Furs	Cash Income	Total Income
1943	\$1,255.00	\$332.00	\$20,443.00	\$21,162.00
1944	\$805.00	\$576.00	\$26,708.00	\$27,208.00
1945				
1946	\$270.00	\$150.00	\$27,467.00	\$29,223.00
1947	\$1,020.00	none	\$23,650.00	\$25,895.00
1948	\$3,130.00	\$500.00	\$44,660.00	\$46,260.00
1949	\$3,060.00	\$200.00	\$33,440.00	\$37,315.00
1950	\$3,785.00	none	\$40,650.00	\$45,995.00
1951	\$11,150.00	none	\$50,650.00	\$57,550.00

Source: Bureau of Indian Affairs (Alaska Native Service) Annual Statistical Reports.

In 1944, for example, an estimated 770 pounds of garden produce included 25 pounds of cabbage, 45 pounds of carrots, 600 pounds of potatoes, 40 pounds of rutabagas, 60 pounds of turnips, and small amounts of lettuce and radishes. Teachers also gave their impressions of the gardening effort or potential. In 1944, Ruby Magee noted in Port Graham that, "This location is very poor for gardening – poor soil, poor climate. The people are busy in the cannery all summer, so caring for large gardens would be difficult." She also noted that the children did not have a school garden, and that some people from Port Graham planted their potatoes in English Bay as the soil was better and there was more sunshine. Teachers encouraged Nanwalek residents to grow gardens, and several years of efforts were reported by Walter H. Knappe. In 1960, he reported,

We had Potato Week Sept. 26 to 30. The school children and club members made posters. Everybody dug their potatoes. They each brought their three biggest potatoes and put them on exhibition in the schoolroom, and the Extension Agent Mr. Liebenthal came Sept. 4th and issued the 4-H club awards and prizes.



Johnny Malchoff Vera Mumchuck Christine Norman Anne Anahonak Phillip Anahonak

Plate 15. School Children with Garden Produce, 1939. Courtesy Jim and Susan Labelle

Also in 1960, the Principal Teacher, Marie Knape, noted in her annual report,

Since this was the initial garden year here, at least for a long time, the report is quite small. However, much more has been accomplished than shows in the report. The village people are proud of the potatoes they have stored for use this winter and they have seed enough in at least four families to plant larger patches next year.

A few new vegetables were tried by the 4-H club. A few heads of cauliflower and a small patch of broccoli did fairly well, so perhaps more will be tried next season. This was a very poor growing season. It was cold for so long that seeds did not start, and then worms bothered. However, people have become interested, so perhaps with a better growing year more can be accomplished.

Garden production did increase in subsequent years, with 2,500 pounds of potatoes reported in 1961, and 3,000 pounds of potatoes in 1962. It appears, however, that production dropped after the Knapes left Nanwalek, for in 1964 Eva M. Kriger, the new teacher, reported only 800 pounds of potatoes, and in 1965 only 100 pounds of potatoes and very little other produce.

THE SUBSISTENCE SECTOR

Seasonal Round

Stanek (1985:52-55) provides descriptions of the historic annual round of activities at Nanwalek and Port Graham. This work provides insight into the transitions and continuities of activities from two time periods - the late 1800s and the early 1900s. Information for these descriptions was provided by knowledgeable elders from Nanwalek and Port Graham and the ethnographic literature. Since the individuals who provided the information lived in Nanwalek and Port Graham most of their lives, travel and resource gathering activities originated at those places. However, they had also lived and worked temporarily in Seldovia, Portlock, and Dogfish Bay, and had traveled to hunting, fishing, and work locations on the outer coast.

From the Alu'utiq perspective, the annual cycle of activities begins in the late winter and early spring. At this time of year, day length increases while the migration and emergence of many species of animals begins. Cod fishing took place in nearshore waters while black bears were hunted as they emerged from their dens and could be found on snow-free slopes and shorelines. Birket-Smith (1953:23) noted that spring was a favored time for shellfish harvests, especially during days of bad weather when ocean travel was impossible. Extreme low minus tide levels during spring months also exposed greater numbers of shellfish. The belief that shellfish poisoning occurred in summer months was another factor determining seasonality of shellfish harvests.

McMullen (1995:tape trans.) noted that seasonal movements continued to be part of her ancestors' annual activity cycle around the turn of the century. This cycle of movement was essential for locating near sources of food and, in more recent times, to be close to employment.

Historically, they always lived in little family units scattered throughout between here (Nanwalek) and Seward and Kachemak Bay. And they had several home sites, some of them had permanent structures and some didn't. And they would travel between those sites depending on the season and what was available for food, or furs, or whatever, or maybe both.

Near the end of spring, around the first of June, hunters stopped hunting bears and many people started cannery work or building and tending fish traps. In the 1930s and 1940s villagers became boat owners or crewed for other fishermen; consequently, many men left the village for a major part of the summer. McMullen (op. cit.) recalls her experience participating in subsistence fishing during the summer months.

Our women did lots of subsistence, our men did too but the men would be gone during the summer months, the majority of them. So it was up to the women to put up the basic part of the subsistence food, and it was all because we didn't have electricity. It (fish) was either dried or salted, so a lot of fish were dried during the summer months, and all us kids were involved in that. I remember spending days and days with my grandmother carrying fish home and helping her clean it up and drying it. We dried it under the docks too. We would hang lots of it.

During the summer, cannery work and putting up salmon and halibut for winter use went on concurrently. Family members not working in the cannery had the responsibility of harvesting and processing subsistence fish. Those working in the cannery did whatever they could in their spare time to help with the harvest. Frequently, the pressures of cannery work were unbearable and workers left the processing lines to engage in subsistence food gathering activities. McMullen (op. cit.) described what often happened part way through the season.

And it was quite an adjustment. For many, many people up until just recently, it still was that way. They didn't always just stay in one place. Not too many years ago my aunt and uncle were still rolling up their bedroll and moving here and moving there. They never ever settled down, even up until they died. They were always on the go constantly. That's the way life was for them and had been always. And as children growing up, and then as adults themselves rearing families and children, they were anywhere they wanted to be regardless of whether the children needed to be in school or whether – the people from the cannery tried to impress upon our people that it was important that they work, they be employed.. They would try for a little while and it didn't work.

For some people the prospect of a secure job and cash to purchase food and clothing was very appealing. McMullen (op. cit.) noted that,

And then there was the opposite extreme where people – that's all they wanted to do. They didn't want to be out there being real mobile and migrant and doing things. They liked the idea of staying in one place and having a home and living there and keeping their children in school, but those were a few, not very many people - they were the exception.

My parents, my family (were like that), my father (Harry Norman) was a non-Native and I think that's why we stayed in one place.

I think settling down in Nanwalek, Port Graham, or out here at Coal Mine, they were basically job related. If people wanted to be able to earn money they had to stay in an area. It was real difficult to keep employment for the people that provided employment because people were used to migrating and moving constantly.

My mother's (Barbara's) parents were semi-located, but they also moved a great deal. Many times they didn't move long distances, across the bay, spend the whole summer

over there, or a month over there. They had different places where they planted gardens and they would go stay there and work the ground and plant their gardens. Then they'd move on when the fish came in depending where that was throughout the bay.

Before, (at the turn of the century) they would move all the way to Nuka and back and then pretty soon as they got older and, I guess, felt limited, then it was just within the bay here itself.

In the late summer and early fall, people helped each other gather wood for winter and pick berries. Some young people went from house to house helping others with gathering wood and other types of work. This was done in exchange for food, clothing, payment, or to fulfill obligations to family members. For some families, the Tanapes, Meganacks, and Anahonaks, who lived at Dogfish, Port Chatham, or Windy Bay, they traveled back and forth from Port Graham and Nanwalek by the season.

They would stay probably a month. They would stock up and rebuild their supplies and then head back out again. It wasn't for long. In the summer (months) then, if they came here at all, they didn't stay here in the village. They were out there at the fish camp, they were out across the bay fixing their garden. They were always some place and then when fall came they were up at the head of the bay collecting fish to dry and get ready for winter again. They would carry all that on their backs with them when they left including their bedrolls. They were strong people and they were really quite old when they quit doing all that hiking and walking over the mountains and down the river drainages (McMullen 1997: tape trans.).

The fall was marked by the last efforts of the snow-free months to catch a few more salmon, usually silvers or spawned-out reds and pinks. In the early part of the century some people moved to winter hunting and trapping camps. Again McMullen (1997:tape trans.) describes her relatives' (Willie Moonin, Malania Malchoff) activities.

My aunt and uncle during this period of the year (fall and winter) never were here in the village. They were in Dogfish Bay or Portlock (Port Chatham) and they didn't get there by boat. They walked, and they carried everything they owned on their back, including their children and grandchildren.

At the turn of the century, some families traveled in skin kayaks to the Nuka or Aialik bay area where they met Seward residents. As noted by Tanape (op. cit.),

There were other people (from) places like Seward that use to come also and stayed there with us for the winter. We would come back in May and try to work in the cannery for 10 cents an hour. And then in the fall after we put away fish, we would go back to Yalik, Nuka Bay, sometimes lot more guys come.

McMullen also described the winter months as follows,

Come holidays, Russian Christmas holidays, there would be this flurry of activity in my village, lots of whispering and anticipation. At certain times of the week, there would be people hiking over here from Dogfish Bay over the mountain in the winter. Groups of people going out to meet them to help lighten their load as they entered back into the village. Especially with the daylight hours being so short, and they would try to hurry them up before darkness set in.

With some resources such as shellfish and some bottomfish that could be harvested locally, the following circumstances prevailed: (McMullen 1997:tape trans.)

Subsistence happened year round, it wasn't just in the summer and fall. I remember the beach below my grandmother's house. We went down and picked *taugtaa*q (cockles) there and then mussels (*amyak*), old maids, we called them. We baked those in the oven - a kind of clam - soft shell clam. And we would get snails and bidarkies and lady slippers even *ciilerpak* (bullhead) in the tidal waters fairly decent sized ones and *uumaaq*q (cook) them.

Sometimes there were so many cockles down there she would string them up in the *ciqlluaq* (smokehouse) and smoke them before she would cook them. She'd have them hooked by hanging from string, and put a little smoke on them and cook them.

In her *ciqlluaq* she had several stomachs hanging there with various things in them. She had oil in them, berries stored in them, she had cockles and clams in *uguq* (oil) in the *aqsaaq*q (seal stomach container). Then she would make a cheese made out of salmon eggs. She would press all the water out of it and let it drip and all the casings from the fish eggs would float to the top and she would keep pressing it.

By the 1940s and 1950s, cash employment made greater demands on people's time. Many of the elders who were familiar with travel and moving to the outer peninsula camps were too old to continue going to those places. Wild resources were harvested more from local temporary camps rather than remote winter camps. Hunting efforts became more oriented around Kachemak Bay. In late winter and early spring, Halibut Cove was a popular marine mammal hunting location (W. Meganack Sr. 1982:pers. comm.). Hunting camps were set up on Cannery Point from which beluga whale, harbor seals, and sea lions were shot as they entered the cove to feed on herring. During this time, outboard motors and modern skiffs replaced kayaks and Norwegian dories. This technology made distant travel easier and weather less of a limiting factor. Trips which formerly required several days could now be made in a few hours.

Resource Harvests

In the 1940s and 1950s, BIA teachers' accounts of wild resource (Native food) harvests provide rough estimates of quantities and groups of resources harvested (BIA 1943 – 1965; Table 3). The records provide valuable insight into the variability in harvest quantities, and some of the difficulties facing resource harvesters. For the year 1944, resource harvest estimates included the following: 600 pounds of game animals (black bear), and waterfowl; 500 pounds of moose; 480 pounds of seal; 3,200 pounds of salmon; and 2,600 pounds of marine invertebrates. The following year, 1945, was a poor year for wild resource production as evidenced by the harvest quantities and comments provided in the annual harvest survey. Only 2,600 pounds of salmon were reported. A note mentioned that, "The climate here is not very good for drying fish." Further notation indicated that no moose were found. The meat supply was inadequate, and that, "most of the men hunt ducks in the winter and perhaps find a few rabbits." Comments go on to say that, "Only two or three families tried to secure seals for food. All the families go clam digging on the low tides." Regarding wild fruits and vegetables, notes indicate, "Very few berries are put up as jam for the winter. The women are busy in the cannery when the berries are ready to pick. The children pick some to eat fresh."

Table 3. Annual Survey of Native Foods for Port Graham - 1943, 1944, 1951.

1943				
Kind of Food	Location/Method Taken	Quantity Gathered	Preservation Method	Pounds on Hand
Game Animals/Waterfowl	No Record	750 lbs.	No Record	No Record
Moose	"	700 lbs.	"	"
Seal	"	216 lbs.	"	"
Eggs-wild birds	"	24 doz.	"	"
Berries, greens (native)	"	50 lbs.	"	"
Fish	"	3,800 lbs	"	"
Clams and Crab	"	2,000 lbs	"	"
Reported by Ruby J. Magee at Alaska Indian Service Station Port Graham FS-89				
1944				
Game Animals/Waterfowl	No Record	600	No Record	No Estimate
Moose Meat	"	500	"	No Estimate
Seal Meat	"	480	"	No Estimate
Eggs-Native Wild Birds	"	--	"	No Estimate
Native Berries and Greens	"	--	"	No Estimate
Seal / Whale Oil	"	--	"	No Estimate
Fish	"	2,800	"	No Estimate
Fish Oil (native)	"		"	No Estimate
Other Native Foods, Marine Invertebrates		2,600	"	No Estimate
Reported by Ruby J. Magee at Alaska Indian Service Station Port Graham FS-89				
1951				
Game animals/Waterfowl		500 lbs.		
Moose Meat		None		
Seal Meat		500 lbs.		
Bird Eggs		None		
Berries and Greens Native		150 lbs.		
Seal Oil		50 gals.		
Fish		5,000 lbs		
Other Native Foods - Marine Inverts.		1,500 lbs.		
Reported by: Kenneth L. Cohen, Alaska Native Service Teacher, Port Graham Station				

Source: Bureau of Indian Affairs (Alaska Native Service) Annual Statistical Reports.

Traditional Resource Use Areas

The resource harvest territory used by Nanwalek and Port Graham residents over the lifetimes of several elders alive in the early 1980s, is a reflection of the area used between contact and contemporary periods (Fig. 4). The use area is based on the recollections of Tanape (1982:pers. comm.) and Meganack (1982:pers. comm.) and reported in Stanek (1985:52-53). It is noteworthy that the use of such an extensive area was probably the result of the time in history when these two informants participated in the furbearer and marine mammal harvest activities of their parents and grandparents. When the Unegkurmiut moved from the outer coast to Nanwalek and Dogfish Bay in the late 1800s, many continued their annual, seasonal resource harvests in traditional areas by moving to specific locations. The intensity of use in locations distant to Nanwalek and Port Graham decreased as reliance on cash employment increased after the 1930s and 1940s. However, elders' knowledge of much of the traditional use area was passed on to their children. They, in turn, continued to hunt marine mammals and land mammals, trap furbearers, and fish commercially in those traditional areas through the present day. This included the entire Kachemak Bay, and of particular interest was the use of the areas beyond Seldovia and east of Homer for moose hunting. An intimate knowledge of the use area is expressed in the Sugcestun naming of hundreds of places throughout their area and this has been documented in Leer (1980).

Traditional Alu'utiq Technology

Stanek (1985:56-82) collected information regarding traditional technologies in Nanwalek and Port Graham. Elders provided information about habitations, transportation methods, and hunting and fishing equipment. Descriptions of traditional technologies provided in 1982 were based on the actual use of such equipment during the lifetimes of the late J. Tanape and the late W. Meganack Sr. During their youth, these two men traveled widely with their families to areas on the outer Kenai coast and in Kachemak Bay. They were prominent fishermen and hunters with extensive knowledge of the country. They lived during a period which spanned the recent traditional past and the contemporary era of modern technology - from traditional skin kayaks and wooden paddles to modern aluminum boats and motors. In all cases, scale models or drawings were made by the informants or the field researcher to illustrate their descriptions. Illustrations were prepared from field notes and diagrams. Interestingly, a number of traditional hunting and fishing implements were in use well into the early 1900s, and several remain in use to the present. Hunting and Fishing Equipment

During the late 1800s and early 1900s, Native fishing and hunting technologies were very similar to those used during the late 1700s and early 1800s. This was due in part to the prohibition against firearm use in sea otter hunting implemented by the Russians and Americans, and the preference of Natives to use arrows and spears so as not to frighten the animal (DeArmond 1969:5,10). The use of many traditional pieces of equipment continued into the early 1900s. Also, the cost of firearms and ammunition and most modern types of equipment was too high for most Natives in the lower inlet communities.

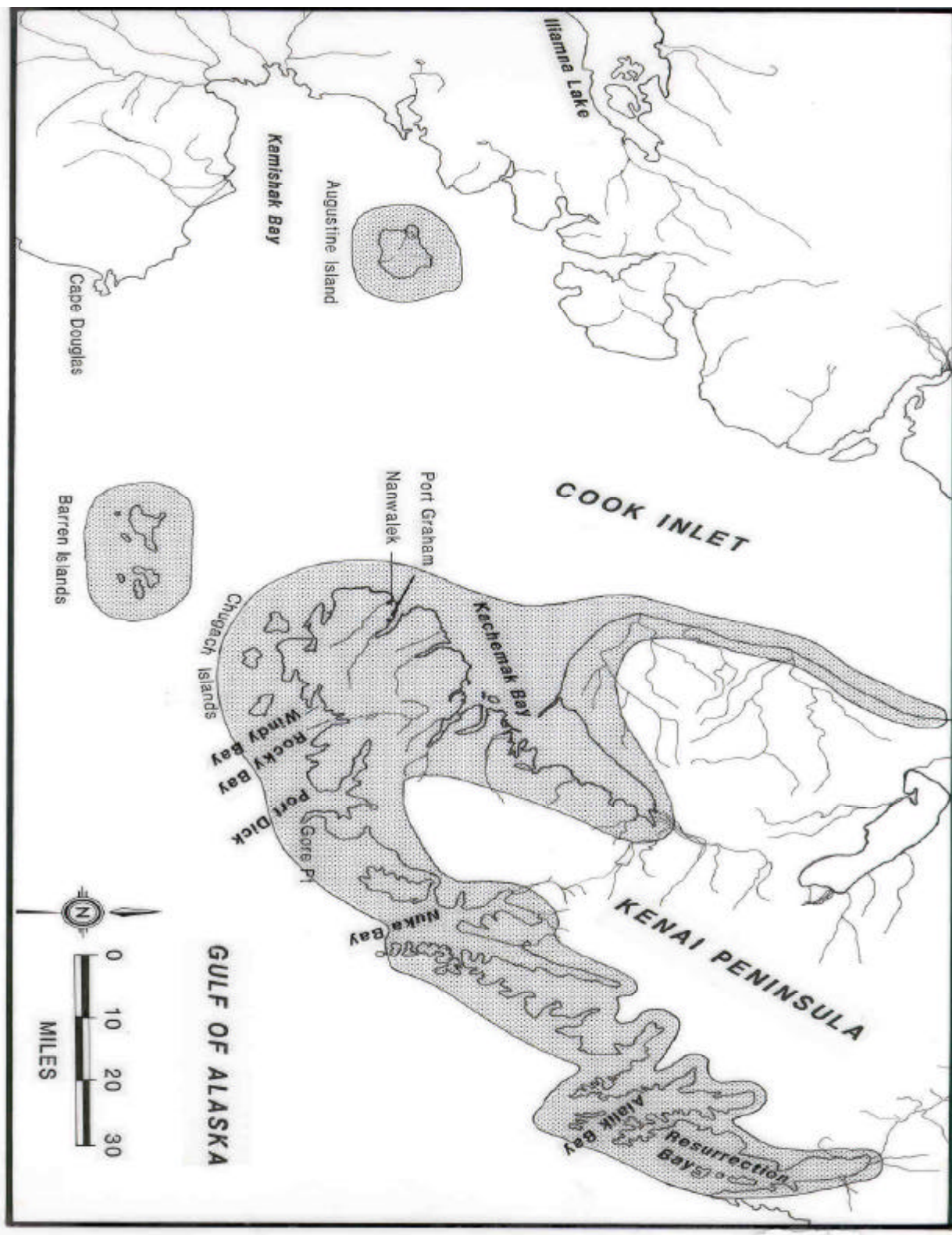


Figure 4. Traditional Wild Resource Harvest Areas of Nanwalek and Port Graham Residents

One of the most important and widely used equipment items was the spear. Spears were used for gathering many near-shore and intertidal resources, and for stream fishing. Several types of spears (*panak*) were described by J. Tanape and W. Meganack Sr. (1982:pers. comm.) and in Birket-Smith (1953:41). During the 1800s, spear points (*cingik*) were made of soft metal obtained from traders, canneries, and sawmills. The points had sizes, barbs, and attachments for specific uses. A small sized spear called *tuqsiiq* with a detachable point was used for stream fishing (Fig. 5). Fish spears had long tapered shafts made of spruce saplings. A short piece of sinew or cord attached the point to the narrow end of the shaft.

Once stuck into a fish, the spear point detached from the shaft. A longer, coiled line from the opposite end of the shaft was held by the fisherman and used to retrieve the spear and fish. For very large fish, the point was not tethered to the shaft, but was attached to a handline. A third type of fish spear with a fixed point (Fig. 6) was used for getting small bottomfish and other bottom-dwelling intertidal organisms (crabs, small halibut and flounder, sea urchin, sea cucumbers, sculpins, rock cod and anything else that could be gotten in the shallows) collectively called *uyangtaa*. Several elders recalled spearing Dungeness and king crab during the 1950s in Port Graham bay.

The use of fish spears by Port Graham and Nanwalek residents continued up until the 1950s. Just before statehood, spears were outlawed by federal regulations. Rods and reels became the legal and adopted method of in-stream fishing. Not surprisingly, the Alu'utiq had something comparable, a hand-thrown line (*caniqsuq*) with a multi-barbed hook used just as a rod and reel to snag fish in streams or in lakeshore shallows (Fig. 7). In contact times, hooks were made from bone. When nails became available, they were bent into hooks. A variation of this device was made from cod hooks tied together in a cluster. A modification of modern fishing lures was to attach pieces of painted wood or red and white cloth to the hooks. Stone sinkers were attached to the end of the line. The hook would then drift in the current and remain off the bottom and move in the stream current. Two other types of fishing devices used into the 1920s and 1930s included the *kapuqaa'un* and the *keluk* (V. Kvasnikoff and B. Ukatish 1983:pers. comm.) (Fig. 8). The *keluk* was a gaff used primarily for removing fish from traps and weirs. The *kapuqaa'un* was a gaff with a releasable hook fixed by a line to a shaft. The hook was thrust at the fish and, as it hit, the hook was released from the handle. A short tether attached the hook to the pole and the fish could be hauled in with the pole. Other means of harvesting large quantities salmon in streams included traps and weirs. These methods enabled fishermen to quickly harvest large quantities of salmon required for winter supplies, and

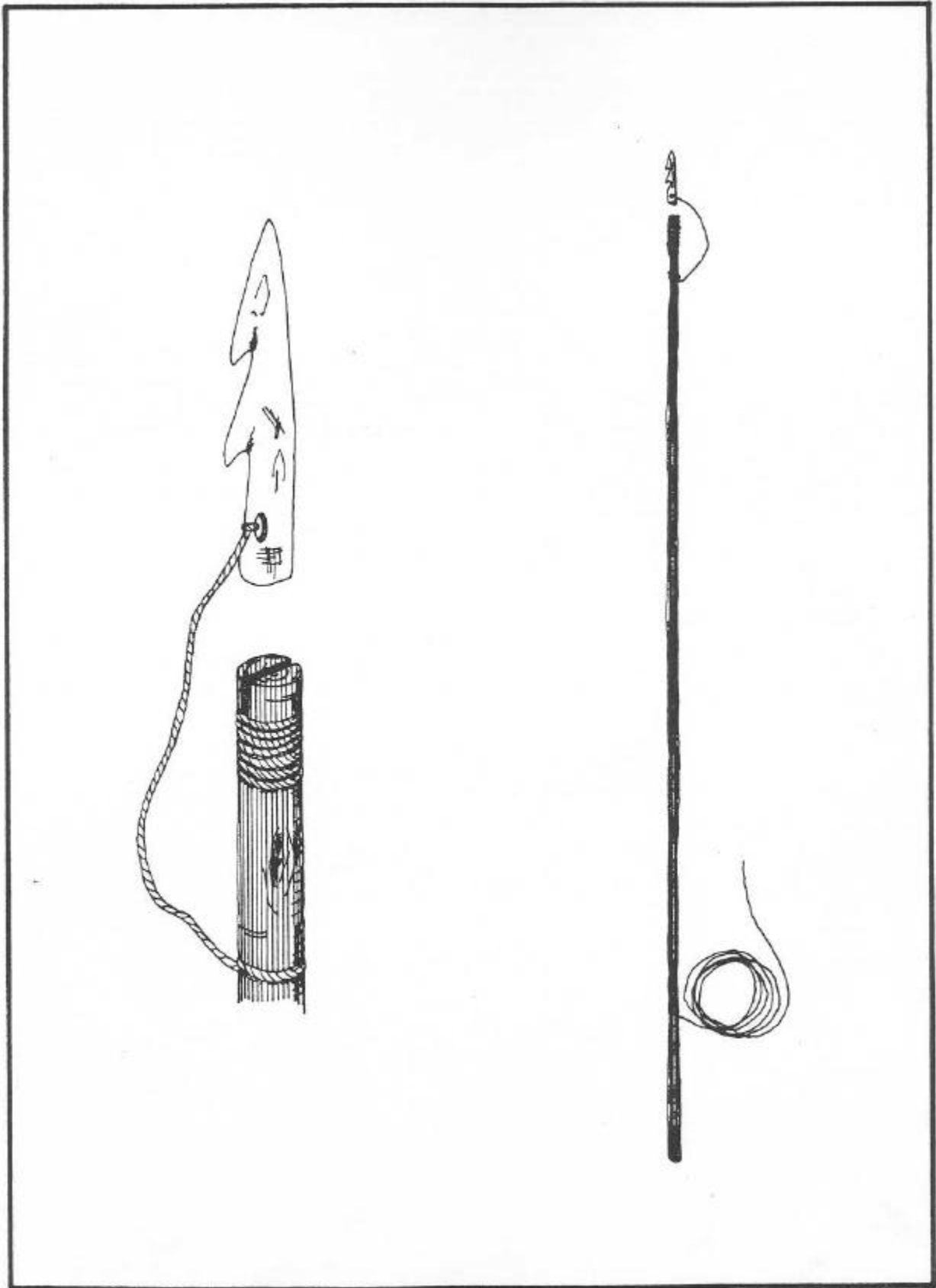


Figure 5. Fish spear (tuqsiq) used for spearing fish in streams and shallow tidal areas. Described the the late Sergius Moonin.

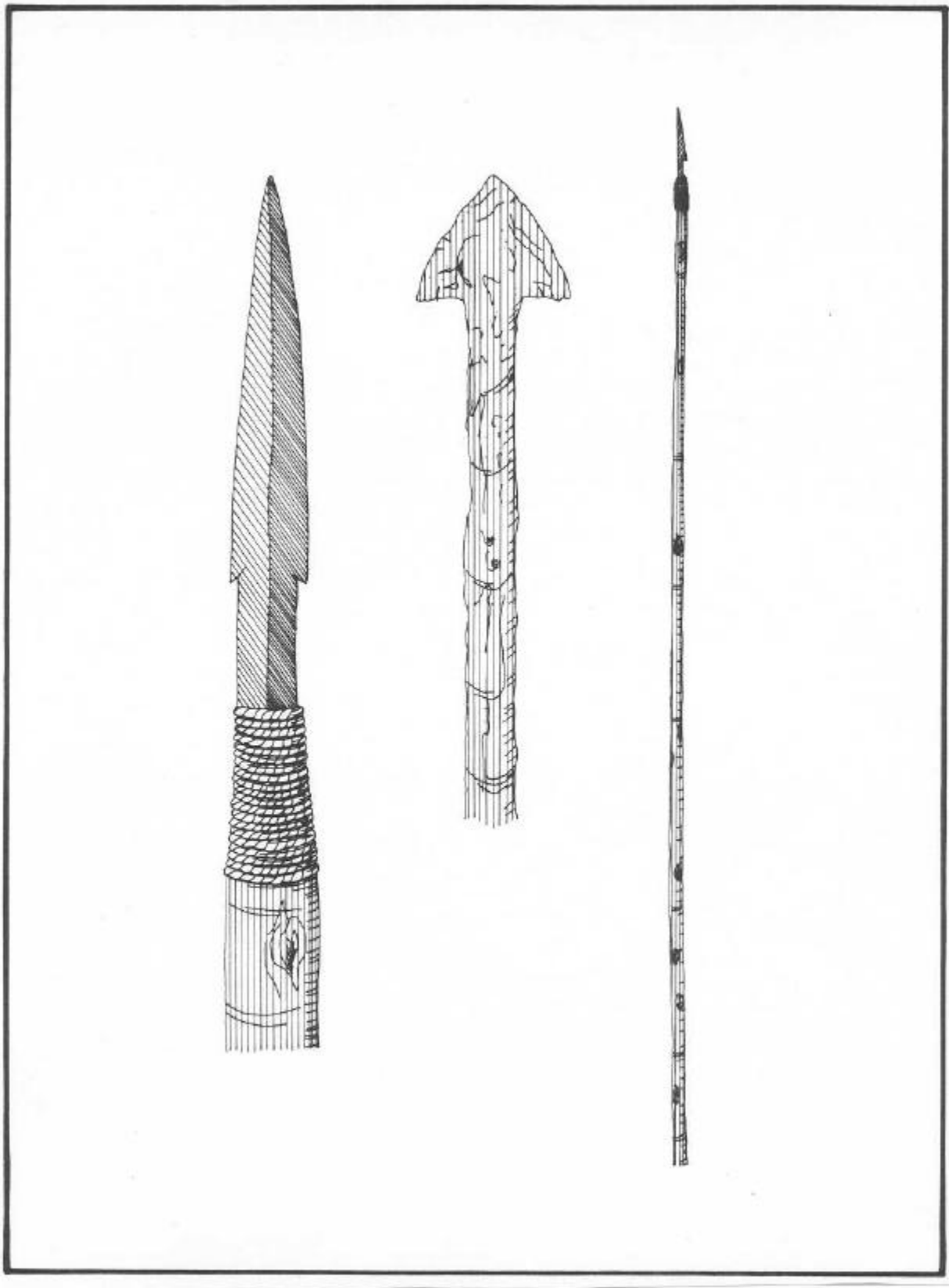


Figure 6. A spear for harvesting bottom-dwelling fish and shellfish. Described by the late Walter Meganack Sr.



Figure 7. Throw-line used for "hooking" salmon in streams usually had a lead weight attached. (1/2 actual size) Described by Vincent Kvasnikoff

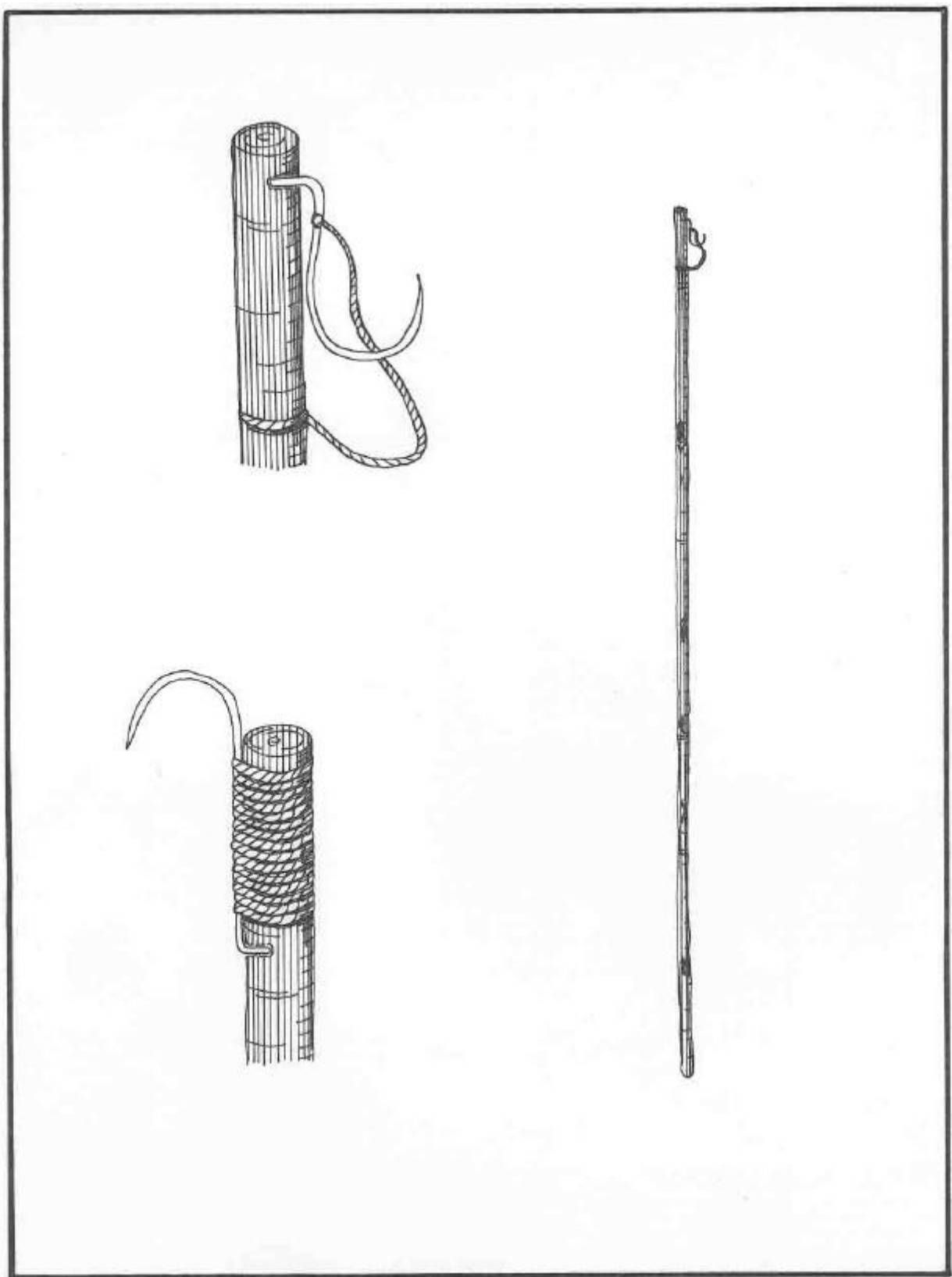


Figure 8. Salmon gaff hooks called Kluk. Described by Vincent Kvasnikoff and the late Ben Ukatish

preserve them by drying or smoking during periods of good weather. Traps and weirs were placed in the English Bay River in both tidal areas and in the falls. In the lower, tidal portion of the river, a weir described by J. Tanape (1982:pers. comm.) (Fig. 9) was used in the early 1900s. The weir was constructed of spruce logs and lashed together with roots. Vertical poles driven into the river bottom held logs lashed between them. A gate was built into the middle, and one end was open at high tide. At high tide a kayaker chased the fish beyond the weir. When the tide receded, a gate was closed and the fish were trapped behind the fence. Fish were then removed with hooks, nets, and by hand.

Another type of salmon trap was constructed in the waterfalls along the lower English Bay River. A fence made of spruce saplings was built part way across the base of the falls. Fish ascending the falls fell back against the fence. Fish held against the fence were removed with gaffs.

For saltwater species like halibut, sculpin, cod, and flounder, several types of handlines were used (Fig. 10). Traditional handlines were made of tightly rolled, smoked-dried kelp called *nuakatat* or whale sinew. After Russian contact, cord line was adopted. Typically, the line was attached to a horizontal bar from which several hooks and weights were suspended. A second hook arrangement in use to the present, had one or two hooks attached to the main line. A third type of line was laid on the beach at low tide with a baited hook on the ocean end and the other end tied off on the beach. Halibut and other bottomfish swimming along the shoreline were caught by this method. A fourth arrangement used for bottomfish involved a buoyed line anchored with a heavy weight. Multiple hooks were attached along the line (Figure 11). This method was particularly suitable for catching large fish since any severe pulling on the line could move the anchor some distance without breaking the line. Fishermen would locate the buoy and retrieve the fish.

During the 1930s, men from Nanwalek and Port Graham had hunting camps in Nuka, Yalik, and Aialik bays where they trapped furbearers and hunted marine mammals for both subsistence and commercial purposes. A federal bounty on marine mammals, eagles, Dolly Varden, and beluga was paid for certain parts turned in to federal agents. The bounty program was instituted in order to protect salmon resources from a perceived depletion by natural predators. A number of Port Graham and Nanwalek hunters traveled on large vessels to the outer Kenai coast to hunt seals and other predators for bounty. For land mammals, steel leg-hold traps were the primary means of capture; however, two traditional deadfall traps were also used. For small furbearers, such as weasel and mink, the *naneryaq* (Fig. 12) was usually baited to attract the animal. Another trap called the *aciirc'estaaq* (to go through) was used for large animals like land otter, fox, wolverine, and was made of one of two logs and set unbaited on a game trail. An animal following the trail walked through the opening between the two logs, tripped the trigger mechanism, and was crushed between the heavy falling log and two other logs buried in the ground.

For taking marine mammals, two types of spears were described. The first had a simple, straight, barbed point which when twisted would remain stuck in the animal. The second had a toggle point which detached from the shaft when the animal was struck. A line from the point was attached to a float made of seal stomach, and which marked the location of the animal. The spear was equipped, in historical times, either with stone points found locally or metal points made from soft metals obtained from ships, canneries, or sawmills (Figure 13).

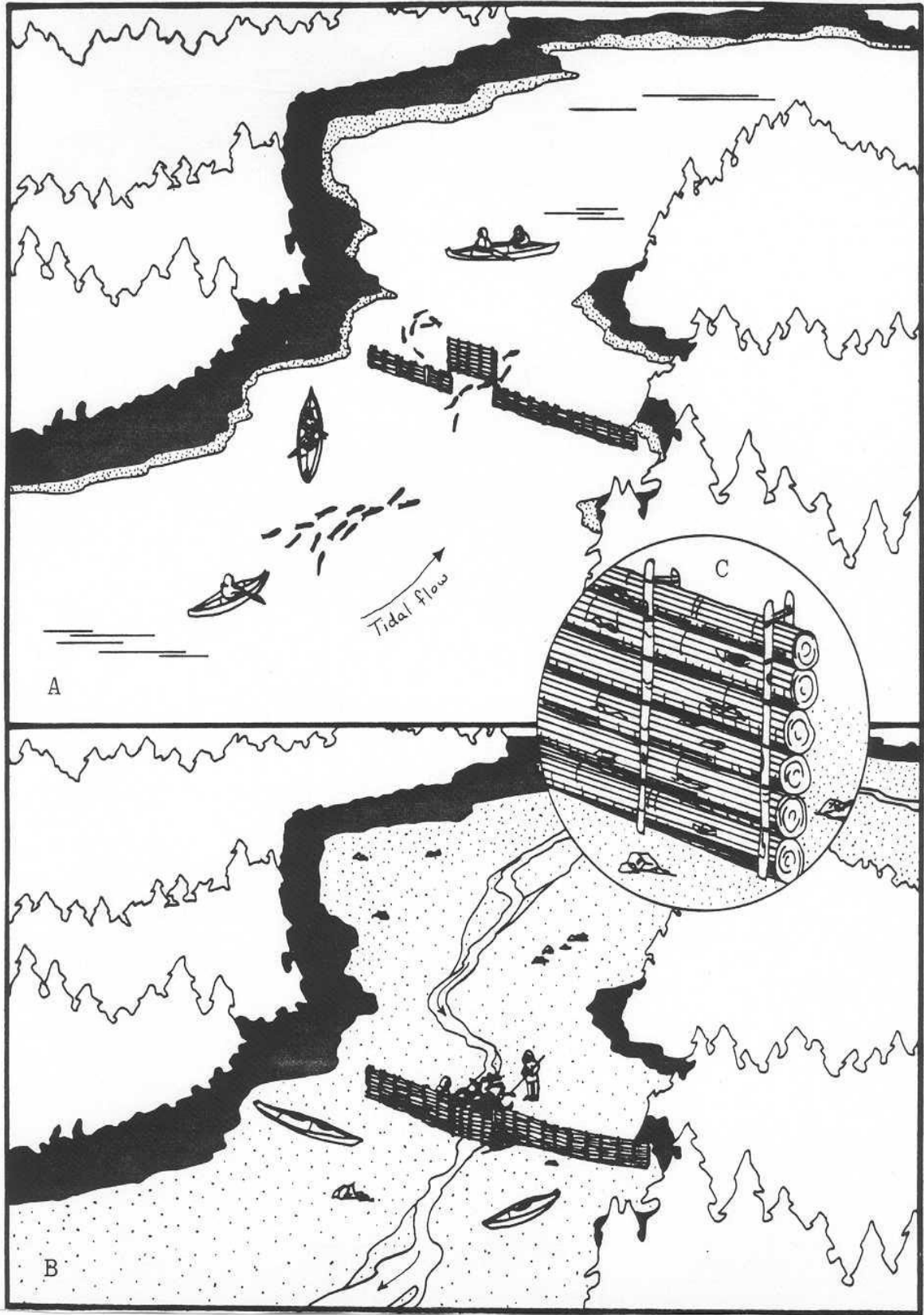


Figure 9. A fish weir used in the English Bay River. Described by the late Joe Tanape.

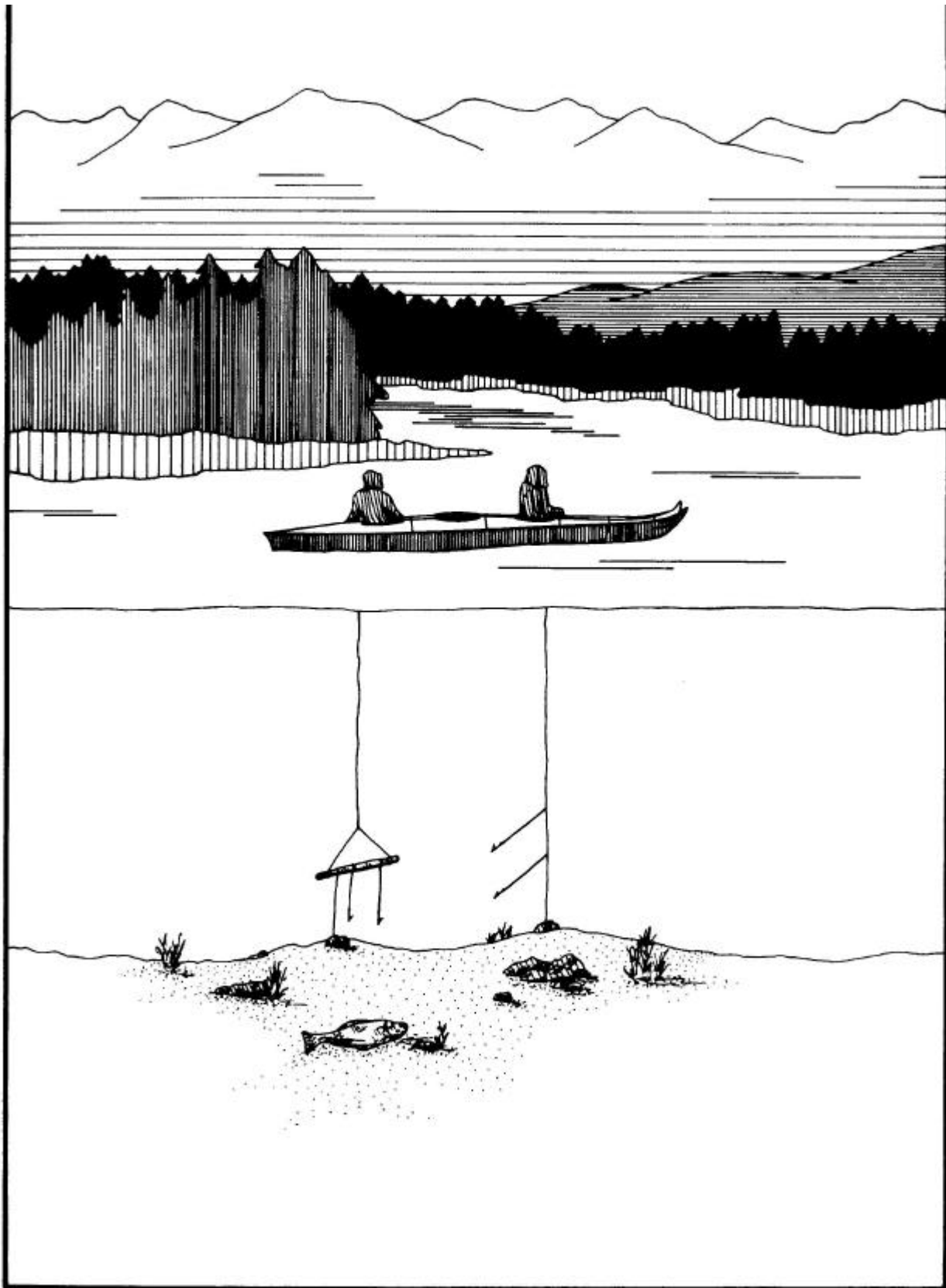


Figure 10. Handline arrangements for catching bottomfish. Described by the late Walter Meganack Sr.

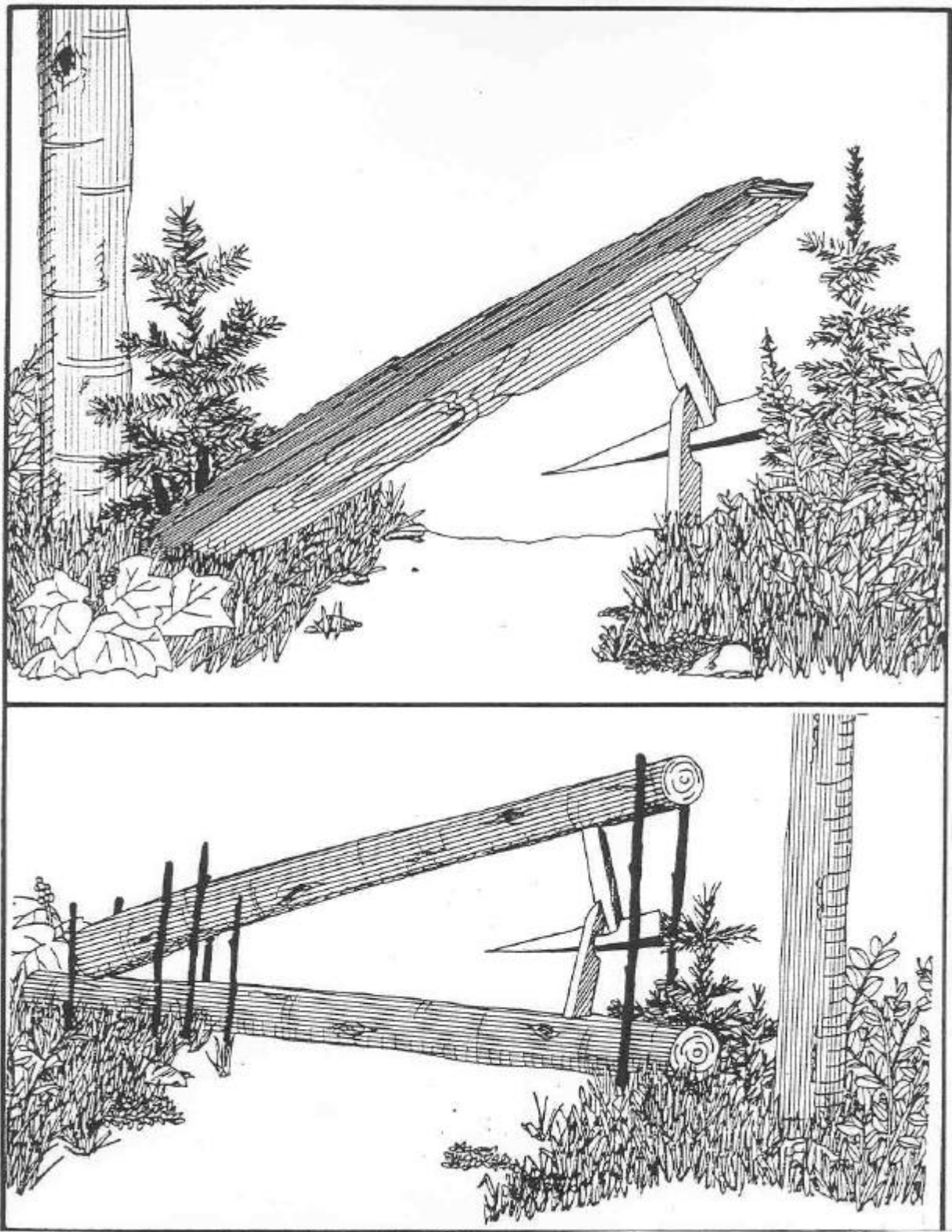


Figure 12. Two Types of Drop Traps for Catching Furbearers. Described by the late Walter Meganack Sr. and Joe Tanape.

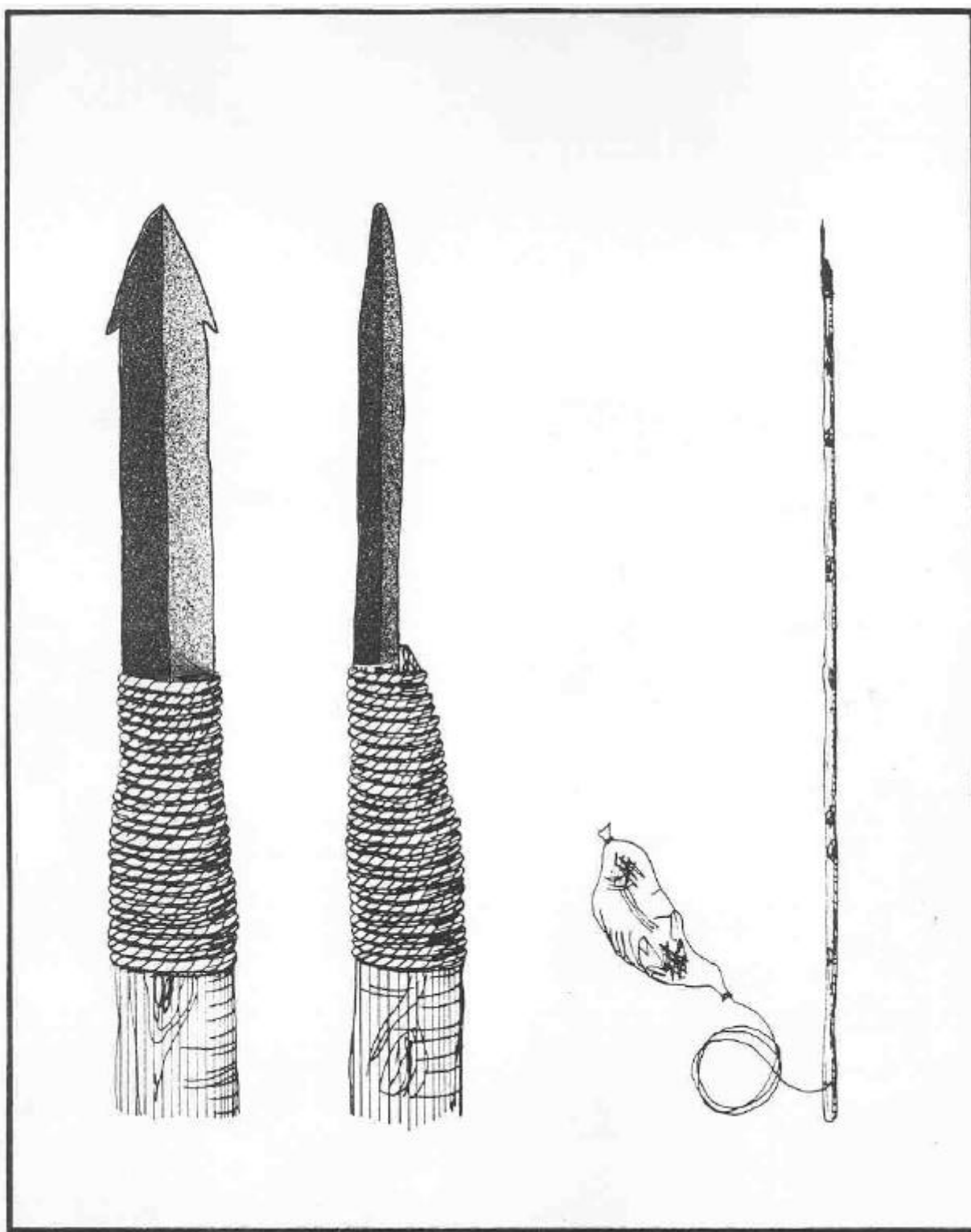


Figure 13. Marine Mammal Spear Called *Panaq*. Equipped During Historical Times with Either Stone Points Found Locally or Metal Points Made From Soft Metals Gotten From Ships, Canneries, or Sawmills. After Sketches by Walter Meganack Sr. and Joe Tanape.

CHAPTER VI: THE CONTEMPORARY ERA 1950s - 1990s

Among the many significant events which affected Nanwalek and Port Graham during this most recent period were Alaska Statehood, a bilingual language curriculum in the schools, the burning of the Port Graham cannery (1960), the 1964 Great Alaska Earthquake, the Alaska Native Claims Settlement Act (ANCSA), and the *Exxon Valdez* oil spill (EVOS). Many technological developments also impacted the communities, including construction of new housing, roads, airports, public sewer and water, and the installation of telephones, satellite television, and electrical services. Burch (1984:657) summarizes many of the changes which took place in Alaska Native villages during the period:

Physically, most villages were transformed between 1960 and 1980. A series of housing programs sponsored by the federal and state governments, and in many areas by Native regional corporations, replaced virtually all the old houses with new, much larger dwellings of more or less standardized construction. Imposing, locally controlled schools, kindergarten through grade 12, replaced the small Bureau of Indian Affairs schools that ended with eighth grade. The old stores were supplanted by virtual supermarkets. Electricity, telephone service, and television were made available in every village; only the very largest towns had any of these services in 1960. Transportation changed to plane, snowmobile, and all-terrain vehicle instead of dog team and boat.

Both Nanwalek and Port Graham experienced dramatic physical and functional changes during this period. The small log and frame clap-board houses of the late 1800s and early 1900s were replaced once in the 1960s with larger frame homes set on pilings and again in the 1980s. Both generations of homes brought vast changes in building structure, insulation, heating, space, and appliances. Community transportation and utilities also changed drastically. Roads and an airport were built in Port Graham in the late 1950s, while Nanwalek got an airstrip during the late 1960s, and roads in the early 1980s.

Today, Nanwalek and Port Graham are unincorporated communities located within the Kenai Peninsula Borough. They have five-member tribal governments which are elected Indian Reorganization Act of 1934 (IRA) bodies recognized by the Federal Government as the traditional governing councils for the villages. The councils operate under a constitution and set of by-laws. Councils hold yearly elections, and are composed of a chief, assistant chief, secretary, treasurer, and council member at large. The village councils are eligible to receive funding and services from the state and federal governments. They establish and enforce rules, and maintain tribal offices, a community center, and health clinic and provide a variety of services to the communities including operation of water, sewer, and solid waste services, and maintenance of the airports and roads. Many funds and services are received through the regional non-profit corporation Chugachmiut.

After World War II, Port Graham's population grew as people from Nanwalek, Port Chatham (Portlock), and Koyuktoik Bay (Dogfish) moved there to take advantage of employment in the cannery. When fire destroyed the original cannery in 1960, many families moved to seek employment in other

communities, or were relocated by the BIA. Families returned after the cannery was rebuilt in 1968, and after the ANCSA passage in 1971. The primary factor limiting Port Graham's population growth has been available housing. Several government housing projects in the 1960s and 1980s replaced homes that were too old and beyond repair. The HUD project in the 1980s provided a substantial number of new homes, as well as an improved road system, sewers, and other utilities.

Occasionally, homes become available as individuals or families move out of the community for extended periods. Also, funds for repairing older homes are made available through home improvement projects. In the late 1990s the Port Graham Corporation funded a low income housing project which helped many elderly and low income residents. However, in spite of various housing projects, there still aren't enough homes for all those who wish to move to Port Graham. Jobs and educational opportunities have also become greater limiting factors for most young people wishing to remain or move back to the community.

Nanwalek's population stabilized as some people moved to Port Graham when airport and health care facilities became available. More recently its population has gradually increased to its 1990 level of 158 persons. Like Port Graham, available housing has been a major limiting factor for anyone wanting to move to the community. A few people built their own homes while the majority of houses in recent years were constructed by government housing projects. Even more so than Port Graham, Nanwalek has very limited job and educational opportunities. Motivations for people moving back to and staying in the communities included: a quiet place, safe surroundings to bring up children, less stress than in Anchorage, and easy access to wild foods.

The pattern of population migration to and from the communities, typically includes individuals or families moving to either Anchorage, Homer, or Kenai. Housing and jobs are most readily available in these locations. Most often individuals or families move to Anchorage where they find apartment housing and either work or attend school. Anchorage is the location of the Alaska Native Medical Center, where major medical services are provided. This facility brings a continuous flow of villagers to Anchorage where they often spend lengthy stays while receiving health care.

Land Entitlements and Ownership

Land ownership patterns around Nanwalek and Port Graham are the result of several land entitlement acts including: the Alaska Native Allotment Act of 1906; the 1926 Native Townsite Act; and the 1971 Alaska Native Claims Settlement Act (ANCSA). There are many Native allotments along the streams and coastlines near the two communities. Claims to these lands were based on traditional subsistence use and occupancy, and title was held as a restricted deed of trust by the Department of the Interior. Any sale or major alterations of the land required approval of the federal government and the land owner. The townsite provision allowed people living close together in communities to acquire title to the land under their houses. In both communities, the restricted deed status of private lands exempted them from borough taxes. The Bureau of Land Management acts as the trustee of all unsurveyed, undeeded land within the

communities. Within the townsite, the village council has jurisdiction over the land. Townsite lands were first surveyed in Port Graham and Nanwalek during the 1960s. Outside the townsites, the land is either allotment or village corporation land. Two exceptions in the area include the Blackburn estate at AC Point and the Coal Mine site. Both locations were fee-simple holdings owned by private individuals. At AC Point, the buildings and some land around it were owned by the late Frank Blackburn who managed the ACC property. After it was sold, and subsequently subdivided, a portion was sold and the remainder passed on to heirs.

Land Claims and Buy-Backs

In 1971, the ANCSA allowed Alaska Native people to form village and regional corporations and lay claim to lands outside their allotments and townsites (Arnold 1976). Lands which had been traditionally used for settlement and subsistence purposes were transferred from the federal government to the village and regional for-profit corporations made up of individuals of similar Alaska Native cultural affiliations. The communities of Nanwalek and Port Graham became members of the Chugach Natives, Incorporated, regional corporation, which also includes other Alu'utiq villages of Prince William Sound. It does not include the other villages of Cook Inlet or Kodiak, which belong to separate regional corporations. Incorporation and land ownership allows the groups to engage in profit-making ventures including investment in commodities, real estate, and the development of their lands for a variety of purposes. Tourism, timber harvest, mineral extraction, fish processing, and settlement are some of the economic activities in which the corporations are involved.

During the ANCSA, Alaska Natives had the opportunity to select lands which would be titled to village for-profit corporations. Not surprisingly, Nanwalek and Port Graham residents selected land throughout the area occupied by their ancestors. Some lands claimed by the villages were within Kenai Fjords National Park (KNFP) and the Chugach National Forest. Included were many locations along the outer coast such as Aialik Bay, Harris Bay, and Nuka Bay, where Native villages had existed less than one hundred years earlier.

In the mid 1990s, the *Exxon Valdez* Oil Spill Trustee Council (EVOSTC) offered to buy many Native owned lands within the KNFP boundaries as part of a habitat protection program. In deciding what to do with their park in-holdings, the two communities took very different actions. Many residents of both villages whose ancestors once lived along the outer coast maintain a strong affiliation with these areas, and some people were interested in once again using and perhaps occupying their traditional homelands. Others thought the area too remote from their current residence and preferred to receive money, which they could choose to spend as they wished. The expressed policy of the Port Graham Corporation, for example, was to allow settlement of many of its lands along the outer coast in Windy and Rocky bays (Pat Norman 1997:pers. comm.) This would enable people who once lived in those areas to have either permanent or seasonal habitations and to pursue subsistence activities. According to Norman, many people in Port Graham still remember the days and ways of living in Windy Bay, Port Chatham, and

Dogfish Bay and they wish to pass on the knowledge they have of those areas to their children. In addition, by opening a logging road from Port Graham to Windy and Rocky bays, easier access would be gained to an outer coast harbor for people who wish to travel by boat to more distant locations such as Nuka Bay, Yalik Bay, and other former settlement locations. As of 1997, the Port Graham Corporation had not sold its lands to the EVOS habitat program.

In contrast, the English Bay Corporation board decided to sell over 32 thousand acres of its park inholdings for \$15 million as part of the EVOS program. In corporation board's estimation, the park inholdings were too distant and remote for any reasonable access by their shareholders, and the area should remain pristine and undeveloped (J. Kvasnikoff 1998:pers. comm.). In addition, corporation president Don Emmal (1997:3) said that, "Our lands must provide for our people forever." To do so, \$500,000 from the sale was placed in a cultural and archeological trust fund. The purpose is to establish and operate a cultural resource program with the National Park Service to promote cultural resource protection, studies and interpretation of the history and artifacts within KFNPP, and to train and employ Nanwalek youth in these activities. The remainder of the funds will be distributed to corporation shareholders.

Although all the English Bay Corporation lands were sold fee simple, 6,068 acres in the vicinity of Beauty Bay and the North Arm of Nuka Bay have rights retained by shareholders for subsistence purposes. On the total amount of their former in-holdings, rights of access to archaeological sites and artifacts have been retained (U.S. Department of the Interior 1997). The Kenai Fjords National Park itself is closed to subsistence hunting and fishing, however, private lands are subject to state regulations. Unique in this agreement is the reservation of trespass rights for shareholders, who are defined as,

...a shareholder of EBC and such shareholder's immediate family which shareholder or immediate family maintains a primary, permanent abode on the Kenai Peninsula and such elsewhere and has permission of EBC to engage in subsistence uses on the granted lands to assist his or her immediate family meeting their nutritional and other essential needs or for the teaching or cultural knowledge to or by their immediate family;...(DOI 1997:Warranty Deed page 3)

Exactly how the lands still owned by Port Graham will be used remains to be seen. However, in the words of the late Walter Meganack Sr. (1982:pers. comm.), "we always considered that area (the fjords) as a reserve for our future subsistence needs." For many residents of the study communities, the concept of land ownership and selling the lands used for subsistence purposes runs contrary of traditional beliefs. Mary Malchoff (1997) noted that, "people never needed to own the land they lived on, they moved about and settled in areas they needed to use. Today young people need land as collateral to get going." However, there persists the concept of, "the land being there for the harvest of resources." The Kenai Fjords lands will be there for future generations, and young people will have to learn what to do with it.

GOVERNMENT ASSISTANCE

One of the major social and economic influences on rural Alaska Native community life during this period was the financial assistance provided by federal and state governments. While some of this assistance was provided directly to the communities, considerable portions were distributed through regional non-profit corporations. Needs among villages in the Chugach Region for services such as health care and housing were assessed and funded through the regional nonprofit Chugachmiut (formerly The North Pacific Rim). As Burch (*ibid.*) described earlier, there were major changes brought about by new policies of the federal government toward Alaska Natives. Not all these changes met the desires of the Native people because, while villagers preferred local autonomy, the government bureaucracy sought greater control with little allowance for village self-determination. Despite the government's control of funding, most services in the communities have either become available for the first time or greatly improved. Services such as transportation, communication, health, housing, education, and employment have improved and provide some economic stability for the communities.

LANGUAGE AND EDUCATION, EXPRESSIVE CULTURE, NATIVE VALUES AND VIEWS

Language and Education

During the beginning of the American period (see page 42), considerable scorn and ethnocentric attitudes were expressed by outsiders who came to work in the canneries. Most of these attitudes continued when schools opened in the first part of the century. The ethnocentric policies enacted by school administrators and teachers exerted tremendous pressure on the Natives to abandon their traditions and adopt non-Native culture. Such practices lasted until the late 1960s when changes occurred in national policies on education and racial equality. Then in 1972, the Alaska legislature passed a bill requiring state-operated schools with 15 non-English speaking students to employ at least one teacher fluent in the local Native language. In spite of the efforts to change Native culture, a great many traditions and beliefs, and the Sugcestun dialect, persisted in hidden, suppressed, or transposed ways. It is easy to assume that because many European and American customs, technologies, houses, and clothing have been adopted in the communities, no traditional Native customs, beliefs, or technologies persist. This is far from the case as will be discussed in the following sections. Indeed, the strongest elements of the culture in both communities are the language, subsistence economy, and self-determination.

In both Nanwalek and Port Graham a large portion of the population currently speaks Sugcestun. The most fluent speakers, however, are elders and people between 30 years and 50 years old. Unfortunately, almost no one younger than 25 can understand the language. Sugcestun language programs are provided in the schools and a number of young people are learning the basics of the language, however, English is the primary language spoken in the classroom. Hallamaa (1996) found that in 1995 Port Graham had the larger number of fluent Sugcestun speakers (about 53 people) than Nanwalek

(about 36 people), but that the Port Graham language teachers were not as skilled as those in Nanwalek. So the fate of the Sugcestun language in both communities is in great jeopardy of being lost entirely unless greater effort is made to teach the younger generation fluent speaking and comprehension at home and not just for an hour or two at school.

Expressive Culture

Church and Religion

Denham (1977) reported that by the end of the 19th Century, the Russian Orthodox Church had altered Native Alaskan ceremonial activities extensively. Native religious leaders (shamans) were among the first people that the Russian priests attempted to convert. The result was syncretism of Russian Orthodox Christian and shamanistic practices, in which the village shaman simply added a few of the priests' activities to his repertoire and functioned in whichever capacity was appropriate at a given moment. From the perspective of the Christian priests, the shamans were converted to Christianity; from the perspective of the shamans, the new practices simply augmented their traditional powers.

Since Russian occupation of the Gulf Coast of Alaska, the Russian Orthodox Church has dominated most of the religious practices in both Nanwalek and Port Graham. From time to time in the past 20 years the Baptist church and Church of the First Born have had small followings in Port Graham. In Nanwalek, a rigid following of Russian Orthodoxy has precluded any other religious orders.

Customs and Holiday Celebrations

Most celebrations today relate to important events in the Russian Orthodox Church, the religion of most Port Graham and Nanwalek residents. Table 4 provides an annual series of important celebration dates. The most significant change in annual ceremonies was the introduction of Christmas and Easter. However, some celebrations such as masking are of traditional Alu'utiq origins. Timing of annual orthodox religious celebrations follows the Julian calendar.

During the winter months today, there is a series of events, which relate to Christmas and the New Year. Beginning on January 7th, the events take place over a nine-day period. The first event is Starring or *slaawik*, which starts on Christmas night and is typical in most Russian Orthodox communities in Alaska. It consists of a group of people going from house to house following a large hand-made star (Plate 16; Plate 17), which is spun on a shaft, and singing Slavonic hymns. The group usually begins at the house of the most recently born baby. The star is spun in one direction, then the other at the beginning of each new song. The star and group of followers proceeds from house to house until all the houses in the community have been visited, except those where excessive drinking or other "sinful" circumstances exist. At each home there is usually some offering of food for the visiting procession.

Table 4. Annual celebrations on the Julian Calendar.

Date	Holiday	Activity	Port Graham	Nanwalek
January 14	New Year's Day	Church Service	X	X
40 days	Lent	Give up a favorite activity	X	X
pre-Easter		Hunting prohibited first and last week	X	X
		Celebrations prohibited	X	X
		Rich foods prohibited	X	X
		Consumption of meat prohibited some days	X	X
		Children are instructed to restrain behavior	X	X
		Eat sparingly	X	X
		Drinking alcohol prohibited	X	X
		Bingo Prohibited	X	
Friday	Good Friday	Church Service	X	X
pre-Easter		Carry Plaschanitsa around the Church	X	X
Saturday		Midnight Church Service	X	X
pre-Easter		Change from dark to light clothing	X	X
		Remove dark coverings from Church	X	X
late-April or early-May	Easter	Church Service	X	X
continues		Bake Caliche/Kolich (Easter bread)	X	X
40 days		Red-dyed eggs	X	X
		Children hunt for eggs in graveyard		X
		Bring food to Church to be blessed	X	X
		Ring church bells for 3 days		X
		Easter songs	X	X
follows	Ascension 40 days	Church service	X	X
Easter	Pentecost 50th day		X	X
July 4	Independence Day	Community Picnic	X	X
		Boat Races	X	
		Parade	X	X
		Blessing of the fleet by priest	X	May or June
		Raaces, Games, and Contests	X	
September 27	Cross Elevation	Fasting	X	X
November 25	Thanksgiving	Family dinners	X	X
30 days	Advent (Christmas Lent)	Spiritual preparation for coming of Christ Child		
pre-Christmas		Refrain from eating meat	X	X
		Eat sparingly		
		Parties prohibited		
		Drinking alcohol prohibited	X	
January 6	Christmas Eve	Church Service	X	X
January 7	Christmas, 1st Day	Icon carried to each house, veneration		
		Church Service	X	X
		Starring	X	X
		Choir	X	X
		Food given away at each house	X	X
		Feasting	X	X

Table 4 cont. Annual celebrations on the Julian Calendar.

January 8	Christmas, 2nd Day	Church Service	X	X
		Starring	X	X
		Choir	X	X
		Feasting	X	X
	Christmas, 3rd Day	Church Service	X	X
		Starring	X	X
		Choir		X
		Feasting	X	X
January 10	Day after Christmas	Grave side starring		
		Goods placed on graves for those starring		
January 10-13		Masquerading	X	January 8th
	New Year's Eve	Pageant/Play		
		Community Dance	X	X
		New Year, dressed in white, smells good	X	X
		Old Year, dressed in rags, smelly	X	X
		Policeman	X	X
		Hags or Devils	X	X
		Brides (the 12 Months)	X	X
		Maskers jump in salt water		January 18th
		Maskers blessed by the Priest (Churched)	X	January 19th



Plate 16 Russian Orthodox traditions play a large part in the annual holiday celebrations. Father Simeon Oskalkoff and Port Graham residents follow the star during Christmas celebrations in 1988.



Plate 17. Pete Anahonak Sr. spins the star for well-wishers in a Port Graham household – 1988. Note the Orthodox icons and altar in the background.

The second event, masking or *maskalataq*, is of traditional Native origins. It continues today and is performed in both Port Graham and Nanwalek. Prior to contact with Russians, the Chugach Alu'utiq held a masking ceremony during the winter in recognition of hunting activities. People disguised themselves with masks made of wood or sealskin and danced to drums and songs. After 12 days, when the dance concluded, everyone hid his or her masks and costumes until the next year. Birket-Smith (1953:109) mentions the Chugach performing traditional masking during certain feasts and shamanistic rituals. Masks were hidden in caves to keep them away from young girls. Tanape (1982:pers. comm.) mentioned seeing masking activities during his youth when staying at Yale Bay with his grandfather. Interestingly, McMahan and Holmes (1987) reported that the Sathers, a family who operated a fox farm nearby, found wooden masks in Yalik caves. They removed the masks, painted them, and gave them away to friends. Private individuals are still holding several of these same masks today.

S. Moonin (1981:43) described the masking event.

Masking started a long time ago, before the Russians came. Masking happens in the wintertime. Aleuts didn't know the months long ago; they only knew the weeks. They counted 7 days. They used to mask in the wintertime for 12 days. Every evening they used to mask. They made masks out of boards and seal skins. There was music and drums. Every night they masked for 12 days, 12 nights, till 12 midnight. Then when they quit, all their equipment would be placed away for the next year. They would hide their masks, (boards, seal skins, and hats). Everybody had a good time.

I don't know what got this started. Russia must have found out from the Aleuts. Maybe the Russians knew, maybe the Aleuts found it. Me myself, I don't know.

This Bishop told me, "Keep it up." Other Priests told me to quit masking. The Bishop told me not to quit, keep it up for a souvenir.

The masking was held in the sheds (*ciqlluaq*). There were no houses, only barabaras (Russian for *ciqlluaq*). They danced in the barabaras. In one big barabara there was a lot of people. They dress up when they mask, so no one will recognize them. Their months used to go by the moon. In the middle of winter, when someone would talk about the moon, someone would say it's time.

It's kept up here, and on the Aleutian chain. This Bishop said to keep it up. That it's a souvenir (from) your great, great grandpa's past.

McMullen (1998:pers. comm.) also described masking activity, which she observed her grandparents and uncle perform in the 1940s (Plate 18), "they brought out the masks made of the skin of seal faces, and they danced the seal dance."

The third event of the Christmas holiday celebrations is the *Nuta'aq*. Mishler (1988) provides a description and interpretation of this 12-act play, which occurs on New Year's night. It is essentially a portrayal of the seasonal life cycle. In it there are characters representing the 12 months of the year, the New Year, the Old Year, a Policeman, and two or three old ladies (Plate 19). There are twelve acts to the play, each taking six to eight minutes with a musical accompaniment. The basic theme begins with all the characters dancing around the room. In each act, the Old Year and the three old ladies put up more and more resistance to being shunted out the door. There is a lot of joking and ritualized fighting going on between the Old Year and New Year as the time comes nearer to midnight. In the final act, the Old Year



Port Graham, ca.1970. Lars Moonin, Walter maganack Jr., Richard Moonin, unknown,unknown, unknown
 Walter Maganack Sr., unknow (with guitar), unknown, unknown, unknown, Carl Mumchuck
 Delores Van Huzen, Leslie Ukatish, Anesia Anahonak.
 courtesy of Luba Maganack

Plate 18. Masking in Port Graham, 1970s. Note the masks of two dancers are painted with seal faces.



Plate 19. Nuta'aq ceremony at Port Graham, 1970s

and Old Ladies go out the door at the stroke of 12 o'clock. Following the twelve acts is a dance in which the Old Year and the New Year publicly show their friendship despite the many earlier conflicts.

Traditional Dance

One element of traditional Native culture, which recently came to the forefront, is traditional Alu'utiq dance. As mentioned earlier, McMullen and Tanape reported seeing their ancestors perform several kinds of dances mimicking seals, gulls, and other animals. For many years, however, especially between the 1940s and 1980s, these dances were not performed in public. This was due largely to ridicule from outsiders, and embarrassment brought about by some villagers who usually performed the dances while inebriated. In the 1980s, traditional Native dance became more open and public as a cultural revival movement gained momentum in Native communities. Traditional Native dance groups formed in many communities including Port Graham and Nanwalek (Plate 20). Nanwalek and Port Graham dance groups took slightly different approaches to developing their repertoire of dances. The Port Graham group styled their dances after those performed by people from Kodiak Island. The Nanwalek group revitalized several of the old dances remembered by middle-age members of the community. In addition, they developed several of their own original dances. Dancers are accompanied in some cases by musical instruments, and others by rattles made of puffin bills, and skin drums. They also wear costumes made to resemble traditional skin clothing adorned with feathers, shells, and beads. Typically, each dance is choreographed to tell a story or portray the habits and behaviors of animals and people.



Plate 20. Nanwalek Traditional Dance Group, 1990s

Music

Exactly when the first musical groups began in Nanwalek and Port Graham is not established. In the early 1900s people gathered in private homes to dance and listen to local musicians. In the memories of current residents, the earliest musical group was composed of an accordion, guitar, and fiddle. These instruments were easily transported and the group moved from one community to another. One weekend they might be in Nanwalek, the next in Port Chatham, and the next in Windy Bay or Port Graham. They always played for the masking ceremonies during New Years. For a time in the 1960s and 1970s, two groups of musicians existed in Port Graham and Nanwalek. There was a group of older men who played popular music of the 1930 to 1950s including waltzes and polkas, and a new age rock and roll group which adopted electric guitars, drums, and keyboards as their instruments. The later group became known as the English Bay Band and evolved into its peak years during the 1980s writing many songs cutting several tapes including "Some Nights It Works."

Arts and Crafts

Beading, skin sewing, crocheting, weaving, carving wood, bone and ivory, sewing fabrics, carpentry and boat building (many people built their own wooden and fiberglass skiffs), are among a variety of arts and crafts being practiced in both communities. Many traditional activities have been revitalized through projects sponsored by the school district, cultural grant projects, and alcohol and drug rehabilitation efforts. Although these activities are intended to restore Alu'utiq cultural identity, they have also been effective in reaching out to the public at large in southcentral Alaska. Several "cultural days" have been held in Homer at the Pratt Museum in an effort to bring Alu'utiq culture to the Homer populace and to improve public relations (Plate 21). Demonstrations of traditional Native technology, foods, customs, and lore are presented during several days of activities (Plate 22 and Plate 23).

Entertainment

A variety of indoor games are played as part of the entertainment and fund-raising activities in the communities. Bingo is the most popular game played to raise money for special projects such as community daycare or trips for kids or to benefit someone in need. Individual cash and material prizes could also be won at bingo nights and this added incentive to participate. In the recent past, Rippies and Pull-Tabs were popular games of chance sponsored by the Nanwalek entertainment committee to earn money to support a child daycare program. Music is often played by the band and from tapes and CDs to accompany dances or other social gatherings. In Port Graham, the community center has table games, books, television, and video games available in the evenings. Various programs including dances, arts and crafts, story telling, potlucks, and other social activities are provided. Also popular are basketball tournament between Port Graham, Nanwalek, and Seldovia teams.

QAJAQ: KAYAKS OF SIBERIA AND ALASKA



QAJAQ: KAYAKS OF SIBERIA AND ALASKA

Pratt Museum

August 30 - October 26, 1997

An exhibition featuring model kayaks and accessories on loan from the Alaska State Museum, kayak frame and covered kayak from Nanwalek and Port Graham, kayak accessories including kayak paddles and bentwood hats, and Native crafts including ivory birds, dolls, and masks.

A GATHERING OF NATIVE TRADITION

A Weekend Celebration

Saturday, August 30

Kayak Landing and Greeting Dance - 12 Noon Homer Spit
Potluck featuring Native Foods - 1 PM Bishop's Beach
Native Arts and Crafts Fair, Demonstrations, and Opening of
Kayaks Exhibition - 3 - 7 PM Pratt Museum

Sunday, August 31

Native Arts and Crafts Fair, Demonstrations, Storytelling
11 - 5 PM Pratt Museum
Festival of Native Dance - 7 PM Mariner Theater

Sponsored in part by Homer Council on the Arts, U. S. Forest Service,
Alaska State Council on the Arts, National Endowment for the Arts,
National Endowment for the Humanities, Alaska
Humanities Forum, and Cook Inlet Region Incorporated

View of Island of St. Paul from the Sea of Kamchatska, lithography by Louis Choris, 1822



Plate 22. Nanwalek man in traditional headgear and kayak.



Plate 23. Man in Kayak with Priest anointing.

Folklore, Legends, and Values

In contemporary Alu'utiq society, story telling is less common as a means of conveying societal messages than it was in the past, however, some elders still use stories to pass on ideals and examples of personal conduct to children. There are many stories of geographic locations and significant events associated with those places. Following are several stories, which convey messages about personal conduct and the consequences of acting irresponsibly as told by residents of Port Graham and Nanwalek. Additional folklore and legends of the Chugach region can be found in Birket-Smith (1953:133-176) and in Johnson (1984).

The Young Bear Hunter - *Tan'erlisurta* by S. Moonin (1980a: 81)

There once was a bear hunter who was young and inexperienced. He saw a large male bear and was too scared to shoot. The male bear began running after him and the poor young hunter didn't know where to hide. He ran and ran, and just about the time he was ready to collapse, he fell through a spot on the ground. When he landed, he was in a nice barabara (sod hut).

In one corner of the room sat a beautiful woman. The woman asked him what had happened and the young hunter told her that a huge bear had been running after him. Just then, they heard a noise and the woman said, "Hide quickly. That was my husband who was chasing you." The young hunter had just hidden himself in a dark corner when the big male bear came into the barabara. The bear looked at the woman and said, "Umm, I smell a human in here." His wife threw him some man's mittens that she had found and hung on the wall and said, "Here, these are the ones you always smell when you come in." "Oh," the male bear said, "you're right, I will have to leave for awhile to look for food far away." Then the big male bear left and the young hunter came out from this hiding place.

The beautiful woman looked at the young hunter and said, "If you want, you can stay here while my husband is away hunting." The young hunter didn't know this, but the beautiful woman was really a black bear. He stayed with her for some time and they had two children who were bear cubs.

Then one day the woman said, "You had better leave now, my husband will be back from hunting soon." The young hunter prepared to leave and just as he was going out of the barabara, the woman said, "Take our two babies (bear cubs) with you and care for them. Every time you hear a dog bark, you had better protect our two children from dogs." The young hunter promised to care for the cubs and took them home with him.

One day the man had let the bear cubs loose to play outside and was sleeping. He heard dogs barking, but was too tired to get up. The hunters and their dogs chased the two cubs down and killed them.

The cubs' mother had also heard the dogs and came looking for them. She found her babies and they were dead. She then went to the young man's home and said, "I have found our children and they are dead. I thought I told you to protect them when you hear a dog bark." The young hunter said, "I'm sorry, but I must have fallen asleep and didn't hear the dogs barking." The beautiful woman said, "you're not good enough to have children!" Then she turned into a black bear and tore the young hunter apart.

Those Killer Whales are Really People by Herman Moonin Sr. (1980:75)

They used to talk about killer whales a long time ago. When a person died, it was believed that a person would turn into a killer whale. People respected the killer whales and didn't bother them. They would ask the whales for anything to help them hunting. Sometimes the whales used to get the people some seal by scaring the seals over to the hunter. The people would talk to the whales through an oar (on their boats out in the ocean). From far away, the whales would come right by the hunters and they would just float. The hunters

would ask the whales to bring them some seals or sea lions, and the whales would come back with seals and sea lions.

There was a man one time that wanted to see if it was true that killer whales bring game to hunters. So he went hunting in his bidarka (skin boat) and took some snuff (tobacco) for the killer whales. He called to the whales, "Killer Whales, come and have some snuff." They came to him with their mouths open and they had their lips and teeth apart where he was going to put the snuff in their mouths.

These whales were swimming all around his bidarka and the hunter was throwing snuff in their mouths. The whales would take the snuff and dive under the water, then other killer whales would come up for snuff. When he was out of snuff, the killer whales left and swam into a cove.

This man was very curious about the whales, so he followed them into the cove. He waited and waited for the whales to come up, but he didn't see them after they went into the cove. So he paddled his bidarka all the way to the end of the cove to wait for them there. It was muddy at the head of the cove and when he got there, he saw tracks. The tracks he saw were like humans but different. Some were real small and some were huge. They all headed inland toward the same direction.

The hunter thought to himself, "Killer whales must really be people that put on killer whale clothes." A long time ago the people around here used to believe that when a person died, the killer whales would take them to a certain cove and dress them like killer whales and they would become killer whales.

Story of the Bigfoot - *Nantiinaq* by Sergius Moonin (1980b:79)

There was this man from here (English Bay) named Mumchuck. He and his partner went toward Seldovia to hunt one time by bidarka qayaq. When they were returning by Point Pogibshi, Mumchuck put down his paddle and just grabbed at something in front of him. He started biting and chewing; and when he turned around to his partner, blood was running down the front of him.

Mumchuck told his partner that they were not going to go back to English Bay. His partner was frightened and did what he said. They paddled the bidarka out toward the ocean and finally landed at Koyuktolik Bay. When they got out of the bidarka, Mumchuck turned into Nantiinaq (Bigfoot).

When they didn't come back, people thought they were dead; but they weren't. One had changed to a Nantiinaq and the other just stayed with him. The Nantiinaq was covered all over with hair like a black bear, and he had forgotten his language. When he talked, the only sound that would come out was whistling. It's said that down below, the devil only talks by whistling. That's why the priests don't like whistling. I don't like it myself.

Stories are still used to convey messages. In the instance of pregnancy among teenage girls, McMullen (1995), a long-time health-aide in Port Graham, uses traditional stories to emphasize to young girls the importance of legitimate marriage and sexual relations for ensuring the proper upbringing of children. In traditional society there was a partnership established between the husband and wife to bring up the children. The partnership concept of parenthood is less strong in most marriages today, and there are more single mothers and fathers. However, McMullen notes that she always reminds young mothers that they have a partnership with the baby for its upbringing during its first 18 years.

The Russian Orthodox Church also plays an important role in establishing and maintaining Christian values. A complex mix of traditional Native and Orthodox Christian customs prevail. In addition, Port Graham has a second religious group called the Church of the First Born which provides an alternative and somewhat less strict doctrine than the Russian Orthodox religion.

Among young people in both communities, personal values are strongly influenced by family, school, and the media. Since the early 1980s television has become one of the most popular pastimes with VCRs, video games, and satellite television found in over 90 percent of the homes. In 1997 a number 7th through 10th grade students at the Port Graham school were asked to give their visions of the future. Following are some of those thoughts:

We think that logging the trees around here might be a good thing because the bark beetles on the other side (of the bay) are destroying all the trees and they are slowly moving closer to Port Graham. They will eventually reach here and all the trees will be killed anyway. So by cutting down the trees you'll get new growth in the forest. Also we can utilize the trees before the bark beetles do. The logging will bring money to Port Graham to enhance education and many other important things in the community's future. But not all the trees should be cut down because then the top soil is vulnerable to erosion. The trees here also serve as wind breakers, without them to block the force of the wind much damage could be caused. Also they serve as a habitat to diverse wildlife inhabiting this region. Jessica and Jeanette 3/11/97

We see Port Graham as a city in the future and not a village. We see bigger stores, lots more crime, more people of other origins move here for work, the feeling of togetherness is lost, the families now will be gone, a lot of pollution, bigger schools, industrialization happens, the economy will go up, more jobs, modernization of transportation, facility improvement on the sewer system, a technological revolution, better housing, subsistence will fall dramatically due to increase of population, the extinction of Native culture. Jennifer and Martha 3/11/97.

The Windy Bay road is supporting jobs for some people here. The logs cut for the logging companies will supply shareholders here with money. We can go to Windy Bay and Rocky Bay to fish, go picnicking or camping. The logging dock can be used as a ferry dock after they are done with the logging. The cannery is getting a commercial smoker maybe. The airport between here and Windy Bay will make it easier for supplies here. Make houses on Windy Bay Road. Sewage hookup and electricity. Make the roads from the middle of the village to the Windy Bay Road the houses up there. More business to attract people here. Oil drilling in the Cook Inlet and outside of (the) bay. Storman and Quentin 3/11/97.

CASH SECTOR OF THE LOCAL ECONOMY

As will be shown in the discussion about contemporary subsistence harvests below, the subsistence sector of the mixed subsistence-cash economy of Nanwalek and Port Graham in the 1980s and 1990s provides a variety of highly nutritious and valued foods. Although particular resources may be scarce in a given year, others are usually available to compensate for the shortage. In contrast, the cash sector of the local economy of both villages remains under-developed and generally unreliable. For example, as shown in Figure 14 and Figure 15, cash incomes are very low. In six study years in the late 1980s and early 1990s, with one exception, per capita earned incomes in both communities were about \$6,000 or less. According to US Census data, in 1989, the per capita cash income in Alaska overall was \$17,610. In 1989 and the early 1990s, incomes in Nanwalek and Port Graham most closely resembled those of the Wade Hampton (\$6,519 per capita in 1989) and Bethel (\$8,833 per capita in 1989) census districts, which are mostly composed of small, remote, Alaska Native villages which, like Nanwalek and Port Graham, are highly dependent upon subsistence resources (US Department of Commerce 1992).

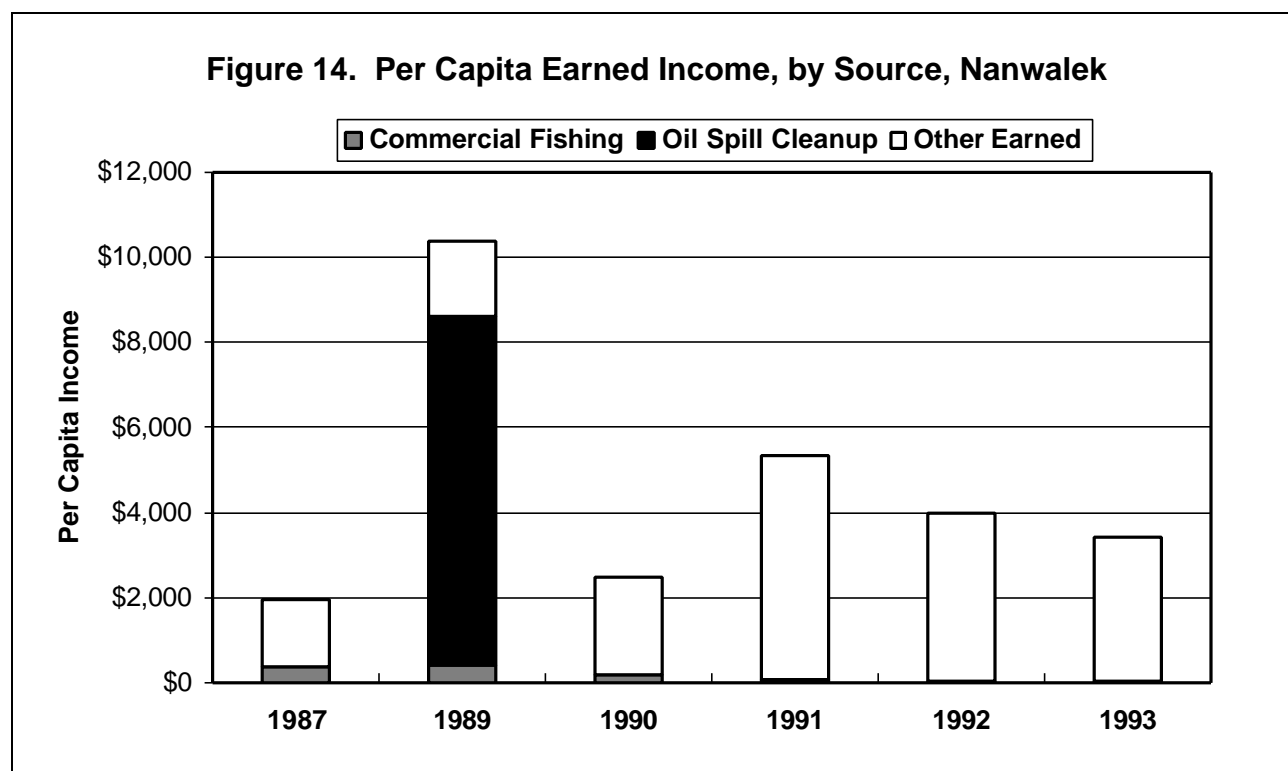
Figure 14 and Figure 15 also show that in the year of the *Exxon Valdez* oil spill (1989), cash incomes rose in both villages. This was a consequence of the short-term employment opportunities that arose in the oil spill clean-up. There was virtually no oil spill employment in either village after the first spill year. Despite the large cash influx from the oil spill cleanup work and some subsequent logging employment, households interviewed by the Division of Subsistence in the early 1990s considered their financial situation to be the same or worse than before the spill. Thus, while the spill left lingering suspicions about resource contamination and reduced populations of some species, it produced only a very short-lived boost to the cash sector of the economy.

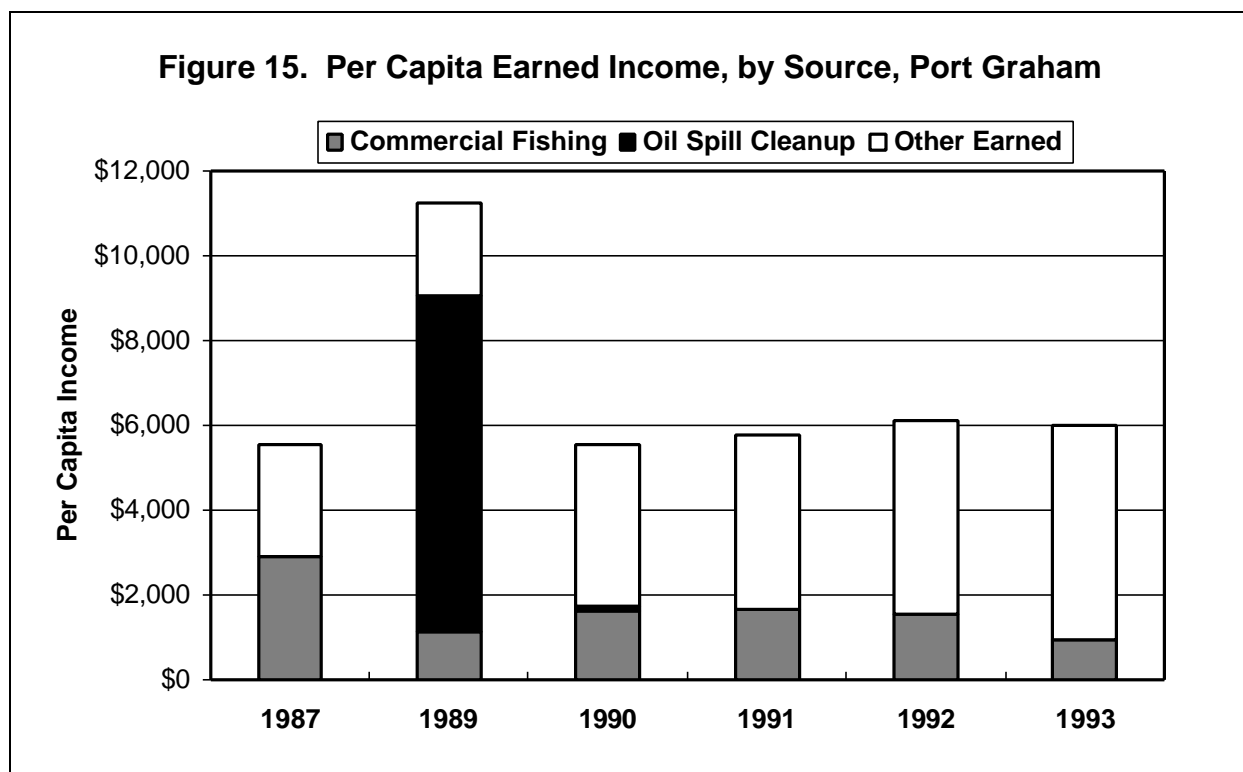
Systematic household surveys conducted in both villages by the Division of Subsistence in the early 1990s (Stanek 1995a, 1995b) documented a seasonal pattern of cash employment with few adults holding year-round jobs. For example, from 1991 through 1993, only about 33 percent to 38 percent of employed Port Graham adults had year-round employment. The corresponding percentage for Nanwalek was between 13 percent and 27 percent. The average employed adult in Nanwalek worked about 7 months annually in that three-year period; the average for Port Graham was about 8 months annually.

Over the last decade or so, the local economies of both Nanwalek and Port Graham have shifted away from commercial fishing as the focus of the cash sector to a reliance on short-term and temporary jobs in construction and repair of local homes and roads, a short-term logging project, services, and local government jobs. Writing about the late 1970s, Braund and Behnke (1980:209) noted that "commercial fishing and the Port Graham cannery provide the bulk of the year's cash for the majority of Port Graham and English Bay residents." In 1987, commercial fishing and fish processing work contributed 53 percent of the total income at Port Graham and 24 percent at Nanwalek. By 1993, however, this share of total income had dropped to 11 percent and just 0.4 percent in Port Graham and Nanwalek, respectively.

There are, however, several prospects which may help support the cash sector of the local economy in the future. A project to restore runs of sockeye salmon to the English Bay River has shown promise. That, and several other salmon enhancement efforts funded in part by money from the *Exxon Valdez* oil spill settlement, have supported the reopening of the salmon processing facilities in Port Graham, providing some new employment opportunities for both villages. These facilities were destroyed by fire in January 1998, and a new cannery built in 1999 opened for processing in the summer of 1999.

In the late 1980s and early 1990s, unearned income sources such as the Alaska Permanent Fund dividend, Native corporation dividends, social security, and unemployment benefits contributed over one-third of annual household incomes on average in both communities. In 1993 at Port Graham, these sources represented 39 percent of all income, about \$3,804 per person. Of this, about 47 percent derived from corporation dividends, 21 percent of the Alaska Permanent Fund, 18 percent from transfer payments (such as unemployment benefits, food stamps, and Aid to Families with Dependent Children), and 15 percent other sources (such as social security payments and pensions). At Nanwalek in 1993, sources of income other than jobs contributed 56 percent of all income, \$4,371 per person. As in Port Graham, Native corporation dividends were the primary source of other income at Nanwalek in 1993, at 54 percent, followed by permanent fund dividends (19 percent), transfer payments (18 percent), and other sources (9 percent). Of total income in 1993, transfer payments contributed 7 percent at Port Graham and 10 percent at Nanwalek.





CONTEMPORARY SUBSISTENCE ACTIVITIES

The most comprehensive description of contemporary subsistence activities in Nanwalek and Port Graham appears in Stanek (1985), which also provides in-depth background information on traditional subsistence activities and technologies for lower Cook Inlet Alu'utiq. However, estimates made by Alaska Native Service (BIA) teachers in the 1940 through the 1960s (Table 5) provide valuable insight to the major categories of resources harvested, locations of resource harvests, and community conditions. In calendar year October 1963 through September 1964, for example, an estimated 19,100 pounds of fish, game, and plants were harvested in Nanwalek and in the same period a year later 15,300 pounds were harvested. These provided approximately 258 pounds and 194 pounds per capita respectively and are very likely underestimations of the total edible weight of annual resource harvests, especially in light of more recent estimates, which are larger. One of the major purposes of the BIA's annual food harvest estimates was to determine whether any government assistance would be needed to maintain good health of the school children. A very small estimate of garden vegetables was produced. Notes to the information indicate a poor season for both resource harvests and cash income. Krieger indicates that she anticipates a "rough time" for the up-coming winter. Also noted was the location of moose hunting being on the Homer side of Kachemak Bay. This is consistent with interview information gathered in Stanek (1984) regarding the traditional hunting areas of Port Graham and Nanwalek residents. Also of interest are the estimates of "on-hand" resources since they were made in October at the beginning of winter, there were over 3,000 pounds of smoked and dried salmon available.

The following section draws upon Stanek's 1985 report, with updated harvest and use information from more recent systematic household interviews. Subsistence harvests of fish, mammals, birds, and wild plants continue to be an essential part of the economy and way of life of Nanwalek and Port Graham. From 1987 to 1994, the Division of Subsistence of the Alaska Department of Fish and Game, with the help of local research assistants in both communities, conducted six rounds of systematic household surveys to estimate the annual harvests of wild resources. The results of these surveys reveal that subsistence harvests in both communities are substantial, and provide village residents with large quantities of high quality traditional foods. A list of resources harvested by the two communities is provided in Appendix 1.

At Nanwalek, subsistence harvests ranged between 259 pounds per person usable weight (in 1991) and 305 pounds per person (in 1993), excluding the two years immediately following the *Exxon Valdez* Oil Spill (Fig. 16). The average harvest over the study years (again excluding the two anomalous oil spill years) was 281 pounds per person of wild foods. Figure 16 also shows the devastating effect of the oil spill on subsistence harvest patterns at Nanwalek. Primarily due to concerns about the health risks associated with eating potentially oil contaminated wild foods, harvests in the year following the spill declined by half compared to 1987. Subsistence harvest patterns were very similar at Port Graham (Fig. 17). Excluding the two post oil spill years, estimated total harvests of wild resources ranged between 212 pounds per person (in 1993) and 281 pounds per person (in 1991), with an average for these years of 248 pounds per person. As in Nanwalek and again due to oil contamination concerns, subsistence harvests at Port Graham dropped by about half in 1989 compared to the pre-spill estimate.

Table 5. Annual Survey of Native Foods, Nanwalek 1963-1965.

Nanwalek 1964/65				
Kind of Food	Location Taken	Quantity Gathered in Pounds	Preservation Method	Pounds on Hand 10/1/65
Fish				
Silver Salmon	English Bay	3,000	Salt/Smoke	1,200
Other Salmon	English Bay	3,000	Salt/Smoke	2,000
Halibut	Cook Inlet	800		200
Dolly Varden/other	English Bay River	2,000	Salt/Smoke	400
Meats				
Moose (1)	Homer Side	1,500	Brine	600
Bear (6)	English Bay Valley	1,500	Dried	400
Seal	Flat Island	2,000	Dried	200
Wild Fruits and Veg.				
Blueberries	English Bay Vicinit	500	Fresh/Jam	50
Nagoon Berries	"	50	Jam	10
Cranberries	"	50	Fresh	-
Greens	"	100	-	-
Other, fats, oils, etc.				
Clams/Snails/Bidarkies		800		
Ducks		-	-	-
Totals		15,300		5,060
Notes: "The supply of foods provided for 79 people and no work dogs. Clams, ducks, tomcods available most all winter. Very little ? available. This has been a poor summer for cash and fish. So I anticipate rough time here." Eva M. Kriger, Principal				
Nanwalek 1963/64				
Kind of Food	Location Taken	Quantity Gathered	Preservation	Pounds on Hand
Fish				
Red Salmon	English Bay	4,000	Fresh and Dried	500
Humpies	English Bay	5,000	Dried	400
Silver Salmon	English Bay	4,000	alted and Smoke	500
Halibut	English Bay	1,000		100
Meats				
Moose	Homer side	2,000	Brine	800
Bear	English Bay	300	Dried	
Seal	Flat Island	400	Fresh	
Ducks	English Bay	500	Fresh	
Wild Fruits and Veg.				
Blueberries	English Bay Valley	600	Fresh and Jelly	50
Mossberries	English Bay Valley	100	Jellies	20
Cranberries	English Bay Valley	100		20
Greens - ???	English Bay	100	Jellies	-
Other, fats, oils, etc.				
Clams	?? Bay	1,000	Fresh	-
Totals		19,100		2,390
Notes: Ms Kriger remarked on the adequacy of the supply that it, "Should be sufficient." Regarding sources of foods and availability during the winter she noted, "Clams, tomcods, ducks and seal. Ducks are here all winter." Also that along with store boug				

Source: Bureau of Indian Affairs (Alaska Native Service) Annual Statistical Reports.

Figure 16. Subsistence Harvests of Wild Resources, Nanwalek

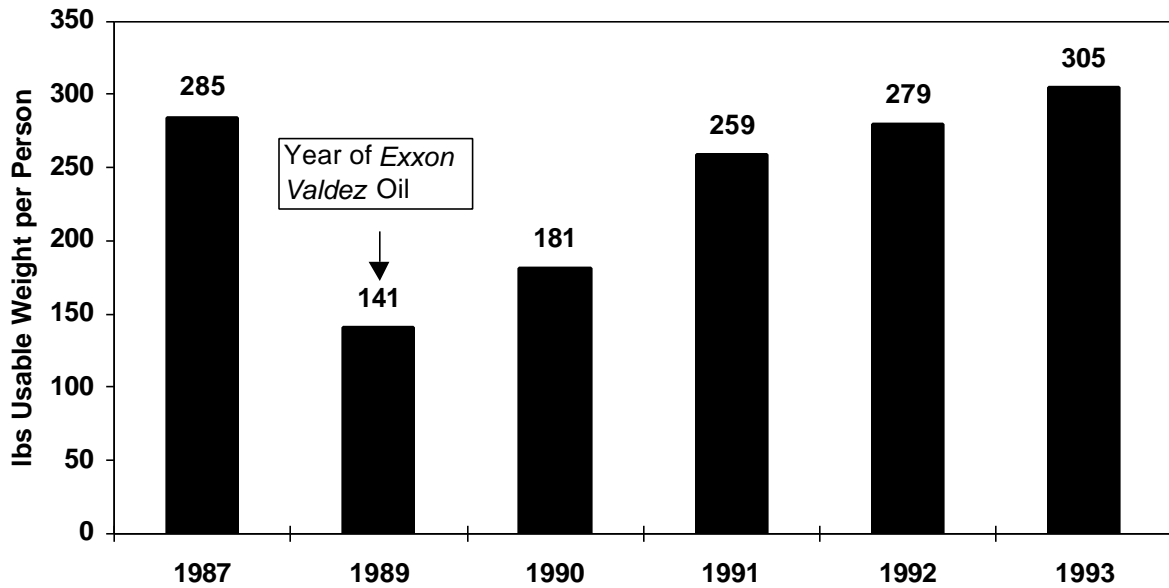
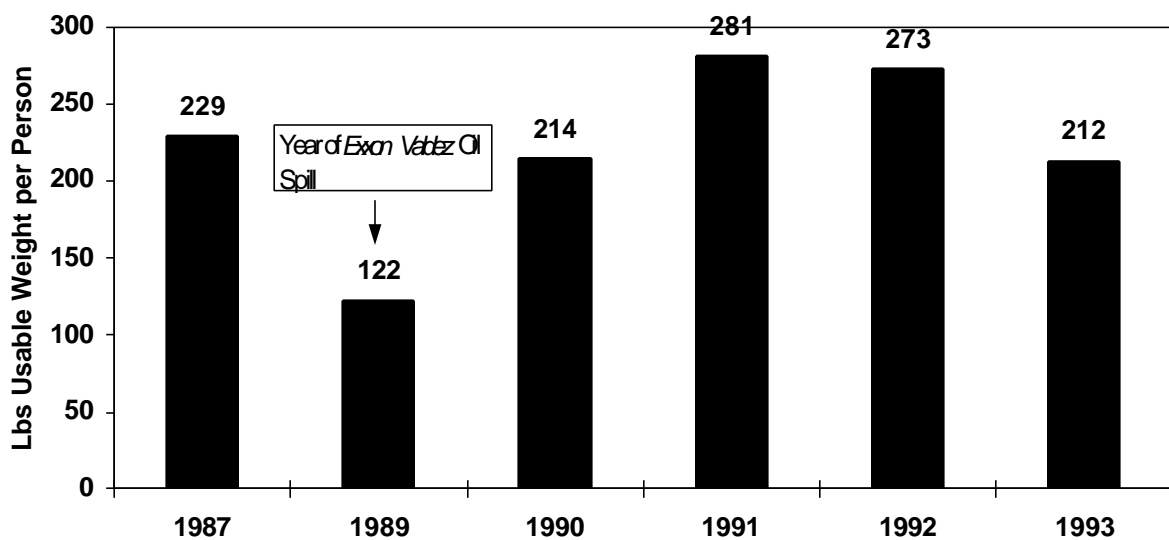
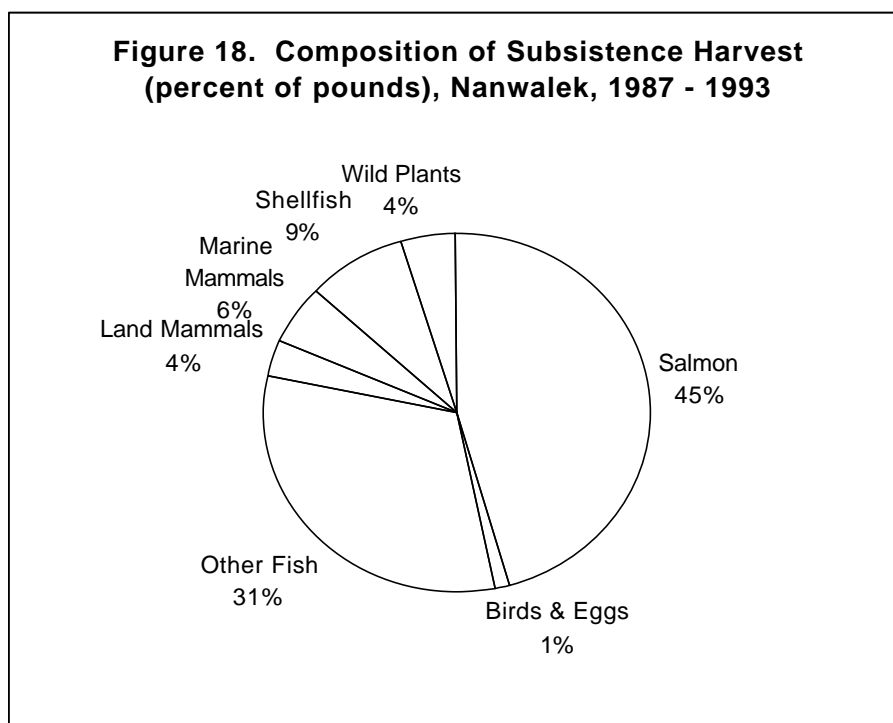


Figure 17. Subsistence Harvests of Wild Resources, Port Graham



The composition of subsistence harvests in both communities is very diverse (Figs. 18 and 19), with a very similar pattern in Nanwalek and Port Graham. In both communities, the largest percentage of the harvest (as estimated in usable pounds) is salmon, followed by other fish such as halibut, cod, and Dolly Varden. Other categories make important contributions as well, such as shellfish (clams, crab, chitons, octopus), marine mammals (harbor seals and sea lions), land mammals (moose, goat, black bear), birds and eggs (ducks, geese, gull eggs), and wild plants (berries, goose tongue plantain, kelp).

The diversity of wild foods used in contemporary Nanwalek and Port Graham is also illustrated by the number of different kinds of resources used on average by households as reported during the household surveys of the late 1980s and early 1990s (Fig. 20). Except for the two years after the *Exxon Valdez* spill, Nanwalek households on average used over 20 different kinds of resources each year, as did Port Graham households in every year but one (when an average of about 19 kinds were used). The average diversity of kinds of resources used over these study years was 22.9 kinds per household at Nanwalek and 21.2 kinds at Port Graham. As with harvest quantities, resource diversity was also negatively affected by the oil spill, falling by about half in 1989 compared to 1987.



**Figure 19. Composition of Subsistence Harvest
(percent of pounds), Port Graham, 1987 - 1993**

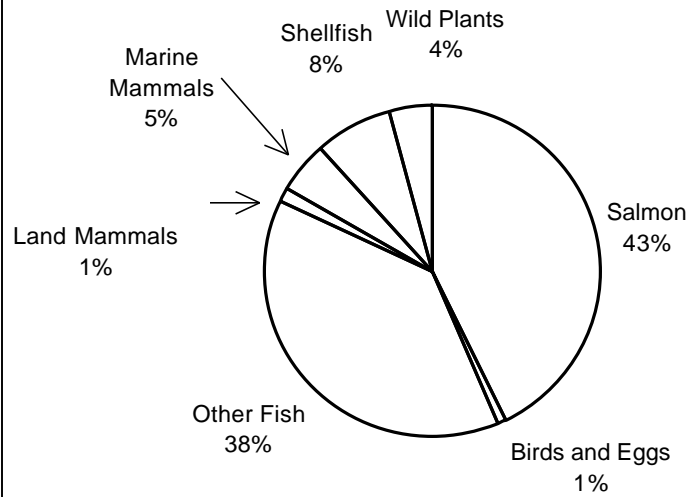


Figure 20. Average Number of Kinds of Resources Used per Household, Nanwalek and Port Graham

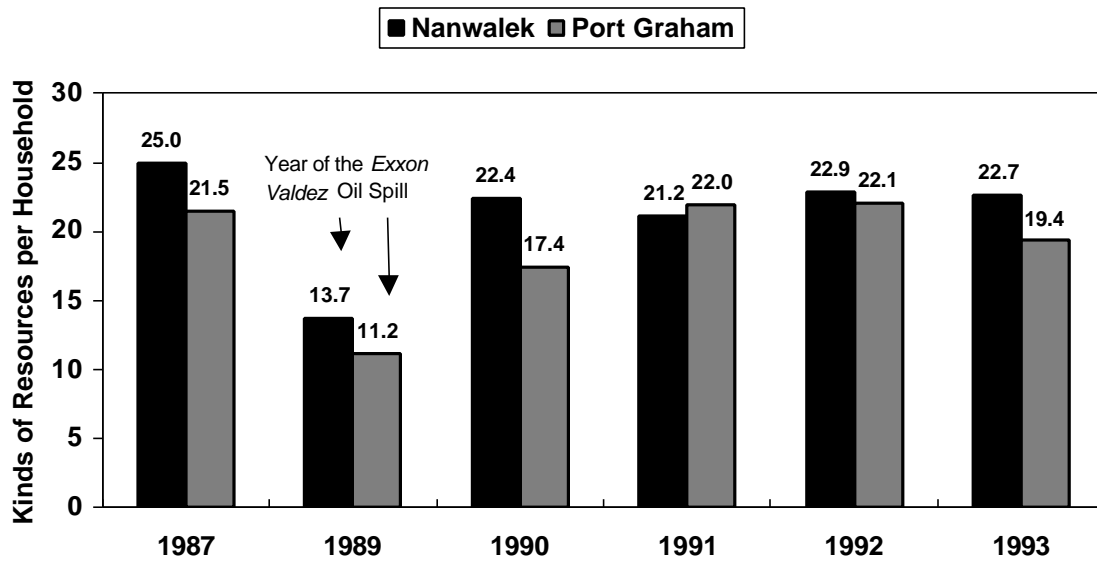


Table 6. Percentage of Households Using Subsistence Resources, Nanwalek

Study Year	Percentage of Households Using							
	Salmon	Other Fish	Land Mammals	Marine Mammals	Birds & Eggs	Shellfish	Wild Plants	Any Resource
1987	93.9%	97.0%	72.7%	84.8%	60.6%	97.0%	97.0%	97.0%
1989	93.9%	69.7%	72.7%	87.9%	42.4%	90.9%	97.0%	100.0%
1990	100.0%	97.1%	77.1%	80.0%	65.7%	97.1%	100.0%	100.0%
1991	100.0%	100.0%	93.1%	72.4%	55.2%	100.0%	100.0%	100.0%
1992	100.0%	100.0%	81.3%	78.1%	59.4%	100.0%	100.0%	100.0%
1993	100.0%	100.0%	90.9%	87.9%	66.7%	100.0%	100.0%	100.0%

Table 7. Percentage of Households Using Subsistence Resources, Port Graham

Study Year	Percentage of Households Using							
	Salmon	Other Fish	Land Mammals	Marine Mammals	Birds & Eggs	Shellfish	Wild Plants	Any Resource
1987	98.1%	94.4%	70.4%	66.7%	51.9%	98.1%	96.3%	100.0%
1989	89.6%	77.1%	27.1%	70.8%	50.0%	70.8%	77.1%	95.8%
1990	95.7%	93.5%	50.0%	71.7%	50.0%	97.8%	93.5%	100.0%
1991	100.0%	98.0%	77.6%	77.6%	53.1%	95.9%	95.9%	100.0%
1992	100.0%	95.8%	64.6%	93.8%	62.5%	100.0%	97.9%	100.0%
1993	100.0%	98.0%	72.5%	80.4%	45.1%	100.0%	98.0%	100.0%

Large harvest quantities and the diversity of resources used demonstrate the strength of contemporary subsistence activities in Nanwalek and Port Graham. This is also evidenced by the almost universal participation of households in both communities in the use of most of the categories of wild foods available in the lower Cook Inlet area. As shown in Table 6, with the exception of the oil spill year, more than half the households in Nanwalek used resources from seven categories in every study year, including salmon, other fish, land mammals, marine mammals, birds and eggs, marine invertebrates, and wild plants. In most years for most categories, 80 percent or more of the Nanwalek households used each wild food type. Similarly, in Port Graham, a large majority of households in each study year used salmon, other fish, marine mammals, shellfish, and wild plants (Table 7). Usually, over 50 percent of the households in Port Graham also used land mammals, birds and eggs.

As shown in the two pie diagrams above, salmon and other fish contribute the largest portion of the total harvest in the contemporary subsistence patterns of both villages. Virtually every household uses these resources. Villagers set subsistence setnets (Figure 21) along the rocky shoreline areas from a few hundred yards up to three miles from each community. They also subsistence fish in Koyuktolik (Dogfish) Bay. Although there is no formal ownership of subsistence set net sites, certain long-time fishermen who have used some of the sites regularly over their lifetimes have had an unwritten claim to first use of those

sites. When they finish fishing, they usually let others use the site. Residents of both communities also use hook and line gear to take salmon for subsistence use from local streams.

After harvesting salmon, Port Graham and Nanwalek people prepare the fish into a variety of foods. Most commonly, salmon are air-dried, or dried and smoked (Figure 22). Fully dried salmon is called *tamuuq*, while half-dried fish is *uumatak*. The latter takes three to five days to dry, depending on the weather. It is stored in boxes or plastic bags, usually in freezers to keep it free of mold. *Uumatak* is often baked or boiled in soups. *Tamuuq* is dried until very hard. It is stored in boxes in cool, dry places. When eaten, pieces of the dry fish are broken off and dipped in seal or vegetable oil.

Another popular salmon product is *palik*, smoked salmon strips. Salmon fillets are cut into strips, tied together at one end and hung over racks in smokehouses. Burning cottonwood or alder in a slow smoldering fire produces a cold smoke. *Palik* generally takes about five to ten days to cure.

Port Graham and Nanwalek people enjoy numerous other subsistence foods made from salmon. These include *sulunaq* (salt fish); smoked, salted, or dried salmon heads; *ataneq*, salmon back bones; hearts and stomachs that are fried with vegetables, mixed with gravy, and served over rice; and skeins of lightly salted salmon eggs.

Although most households in both communities harvest salmon themselves, subsistence fishers also share salmon frequently and widely. Table 8 and Table 9 report the percentage of households in Nanwalek and Port Graham that received gifts of at least one type of resource from seven categories of wild foods in each study year. In Nanwalek, between 72 percent and 86 percent of households received gifts of salmon; in Port Graham, between 71 percent and 94 percent of the households did so. In addition to the salmon food products shared among families, there is extensive sharing of equipment and effort used in harvesting and processing salmon. Figure 23 and Figure 24 show two typical sharing networks. The first is among a large extended family unit in Port Graham, while the second depicts a smaller group of unrelated households in Nanwalek. These are two illustrations of the central value of sharing that pervades subsistence activities in both villages. Further examples of sharing other types of resources appear below.

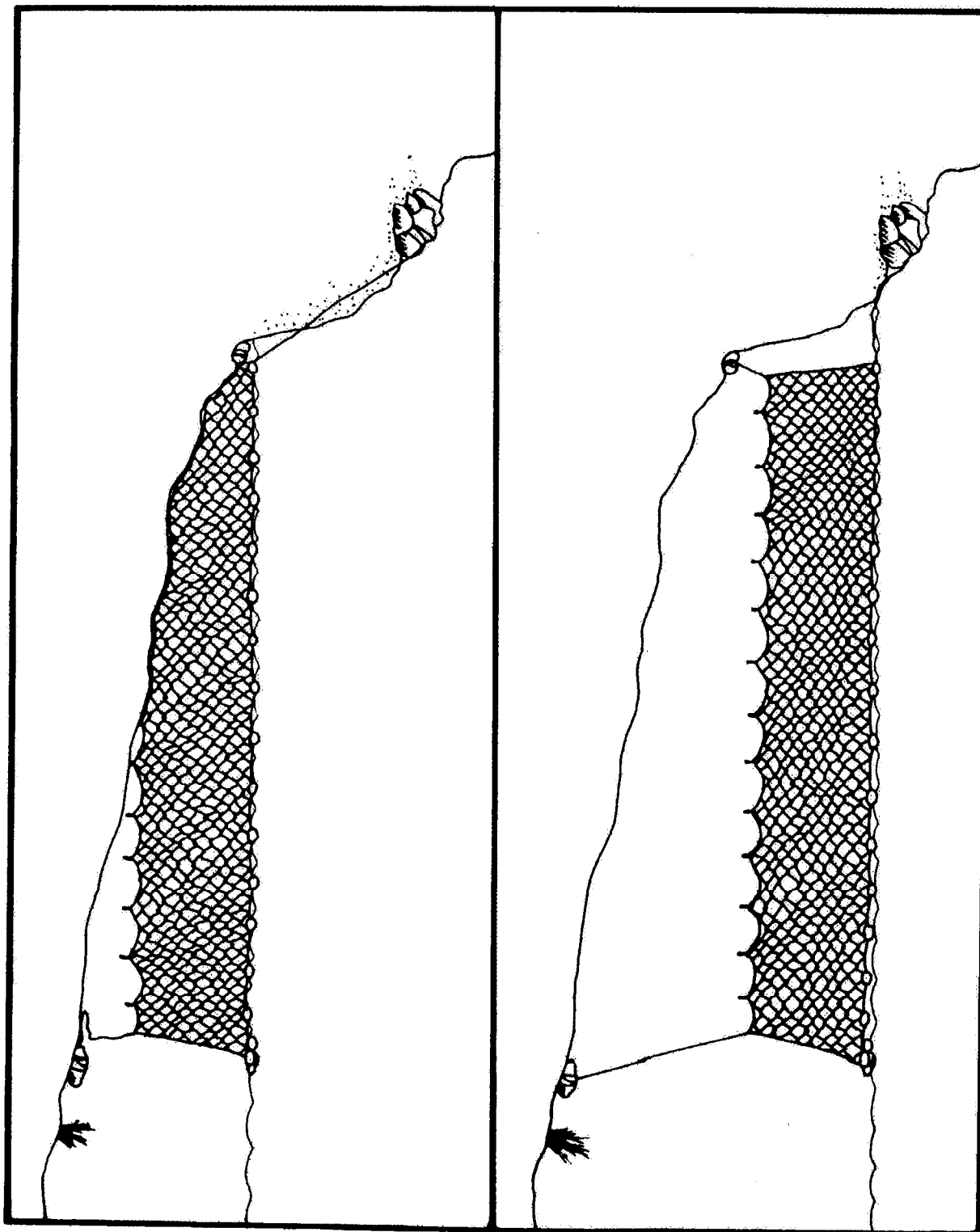


Figure 21. Typical Method of Setting Subsistence Salmon Setnet

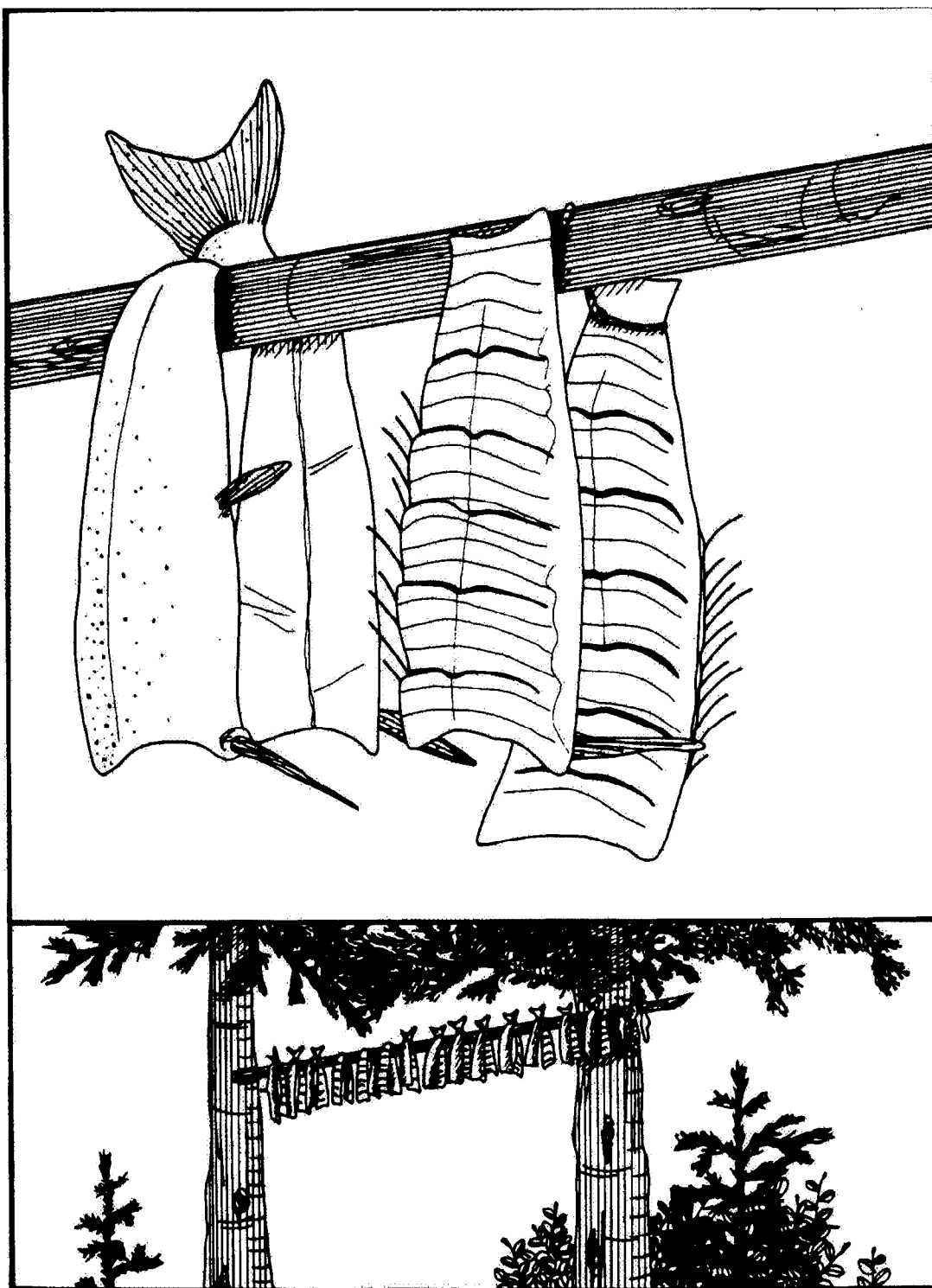


Figure 22. Two Methods of Cutting and Hanging Salmon for Air-drying.

Table 8. Percentage of Households Receiving Subsistence Resources, Nanwalek

Study Year	Percentage of Households Receiving							
	Salmon	Other Fish	Land Mammals	Marine Mammals	Birds & Eggs	Shellfish	Wild Plants	Any Resource
1987	81.8%	93.9%	72.7%	78.8%	45.5%	81.8%	63.6%	93.9%
1989	72.7%	54.5%	69.7%	87.9%	21.2%	66.7%	33.3%	100.0%
1990	85.7%	77.1%	77.1%	77.1%	57.1%	80.0%	60.0%	100.0%
1991	72.4%	86.2%	93.1%	69.0%	37.9%	79.3%	72.4%	100.0%
1992	75.0%	84.4%	81.3%	75.0%	53.1%	87.5%	71.9%	100.0%
1993	78.8%	87.9%	87.9%	87.9%	48.5%	90.9%	75.8%	100.0%

Table 9. Percentage of Households Receiving Subsistence Resources, Port Graham

Study Year	Percentage of Households Receiving							
	Salmon	Other Fish	Land Mammals	Marine Mammals	Birds & Eggs	Shellfish	Wild Plants	Any Resource
1987	75.9%	83.3%	66.7%	57.4%	31.5%	79.6%	50.0%	98.1%
1989	70.8%	60.4%	22.9%	66.7%	33.3%	45.8%	43.7%	91.7%
1990	78.3%	71.7%	45.7%	71.7%	28.3%	82.6%	45.7%	97.8%
1991	83.7%	89.8%	75.5%	71.4%	28.6%	89.8%	67.3%	98.0%
1992	91.7%	89.6%	60.4%	87.5%	43.8%	95.8%	70.8%	97.9%
1993	94.1%	88.2%	68.6%	78.4%	29.4%	92.2%	70.6%	100.0%

The residents of the two villages use a wide variety of fish other than salmon. These include halibut, founder, sculpins, greenlings, lingcod, rockfish, and Dolly Varden. Fishing for saltwater species takes place from small skiffs, piers, shorelines, and commercial fishing boats. Gear includes hand lines and rods and reels equipped with hooks of various sizes. Additionally, herring are caught in set gill nets or seines. Tomcod are harvested through the ice in lagoons and stream mouths by jigging. Dolly Varden are caught with hook and line, and with seines.

Saltwater fish are preserved in a variety of ways depending upon the size of the fish and season of harvest. Large halibut are filleted into strips, then dried or lightly smoked. They are stored, like salmon, in boxes in cool, dry places. Halibut strips are a favorite food, eaten either as snacks or part of a meal, usually dipped in seal or vegetable oil. Smaller fish are cut up and eaten fresh or stored whole in the freezer. Larger Dolly Varden are split with the backbone removed and then dried.

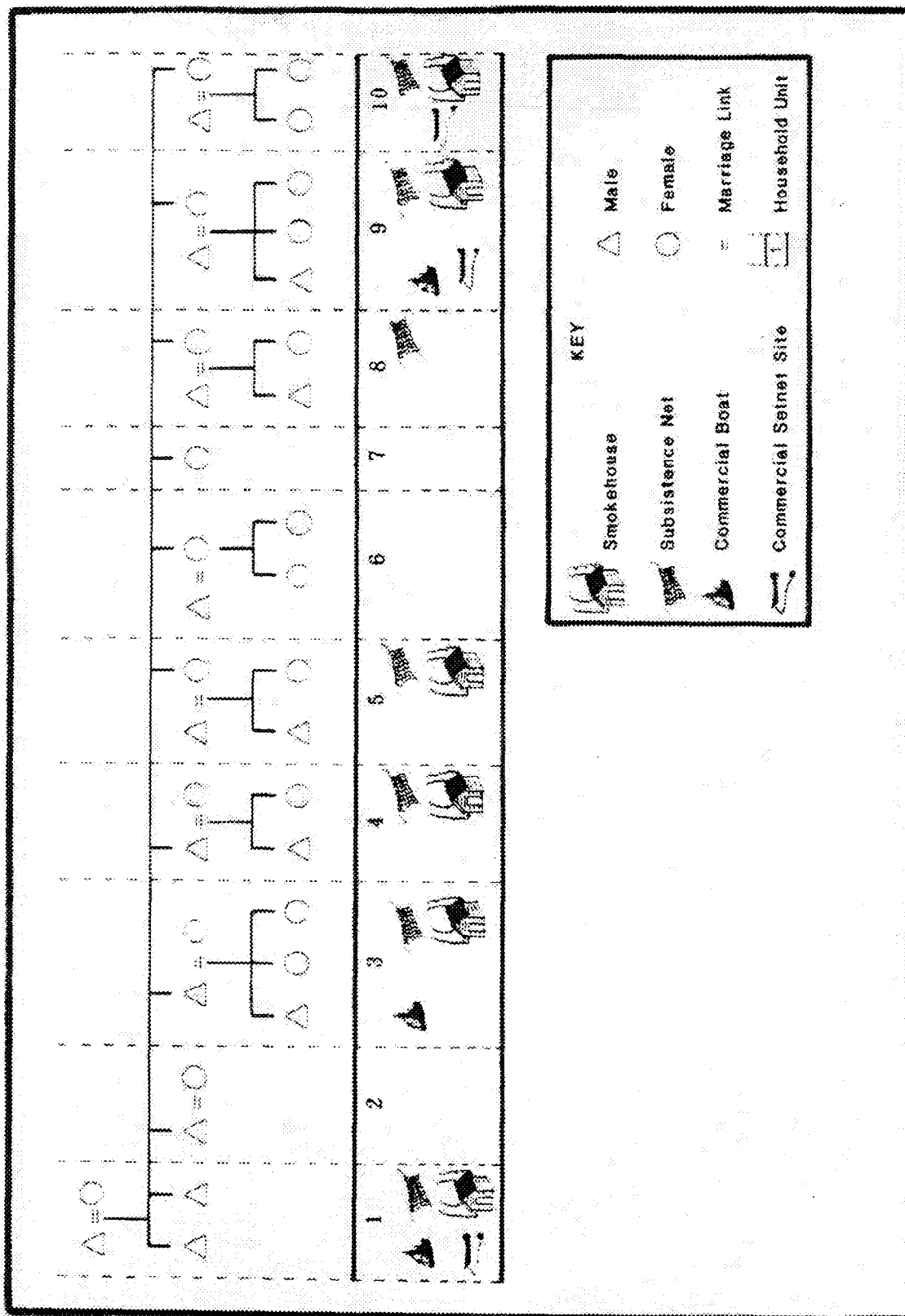


Figure 23. An Extended Family Unit Sharing Salmon in Port Graham.

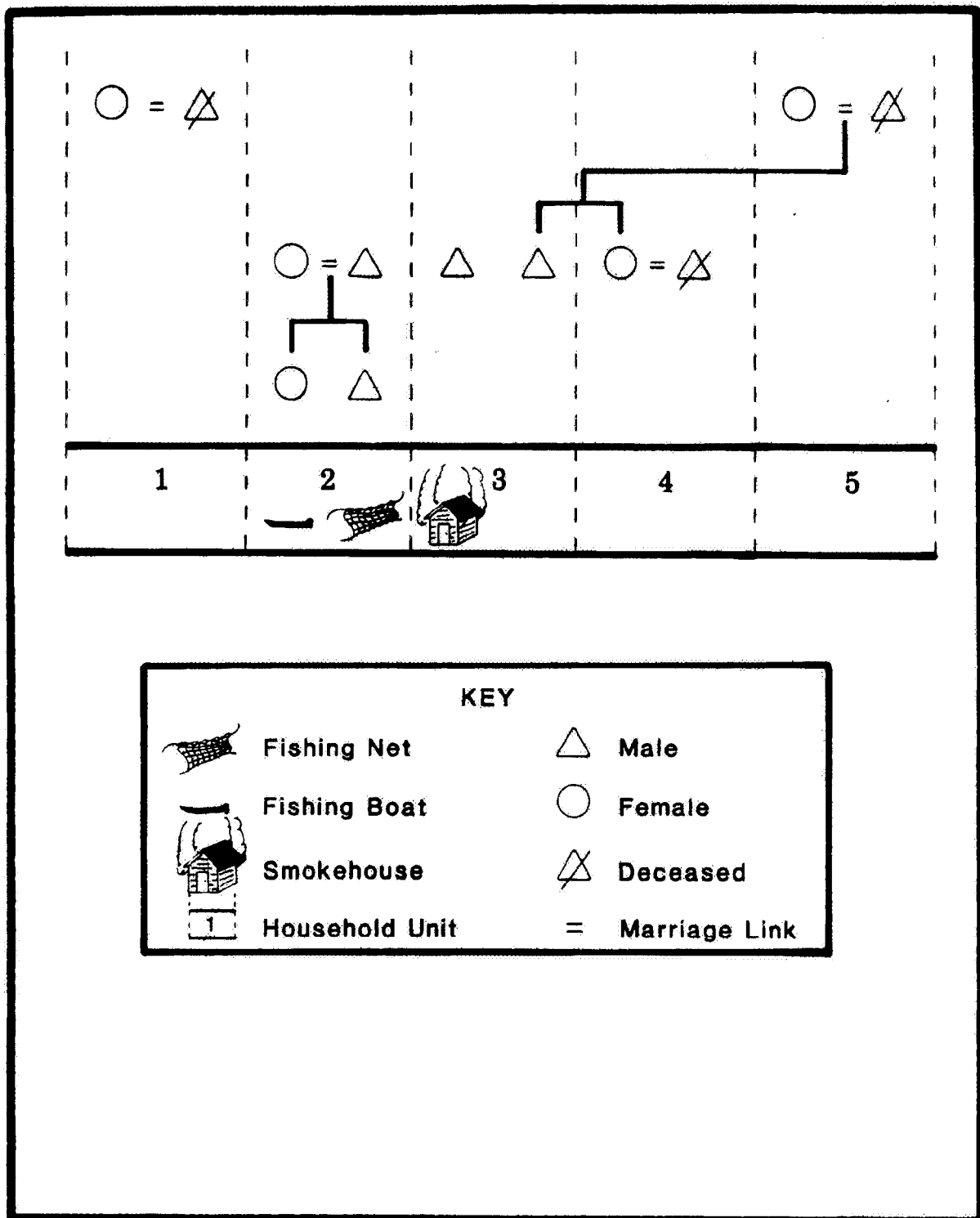


Figure 24. A Group of Unrelated Households Sharing Salmon in Nanwalek.

The people of Nanwalek and Port Graham traditionally used a variety of marine invertebrate species and continue to do so. They are part of a category of resources called *uyangtaaq*; bottom-dwelling species that can be harvested with spears or by hand picking in shallow waters and intertidal areas. Today, the subsistence harvest of shellfish includes about six species of clams, cockles, and mussels; several snail species; two chiton species (locally called "bidarkies"); octopus; and Dungeness, king, and Tanner crab. Harvest strategies today include searching intertidal areas at low tides, with a variety of species collected by hand or with sticks, knives, or shovels. Pots are sometimes used for crab or shrimp. Most shellfish are eaten fresh, although portions of a large harvest are frozen.

Harvesting of intertidal species is especially important because it provides a variety of food and because it is a social activity for young and old alike. It creates an opportunity for older people to teach their children and grandchildren about how to use local resources. Also, as shown in Table 7 and Table 8 (above), marine invertebrates are among the most frequently shared kinds of resources in Nanwalek and Port Graham.

Residents of Nanwalek and Port Graham currently harvest three marine mammal species for subsistence purposes: sea otters, harbor seals, and Steller sea lions. The former is taken solely for its pelt, while the latter two species are taken primarily as food. Both animals are shot with rifles and then retrieved with gaffs and treble hooks attached to a rod and reel. Most hunting now takes place near each community, at haul-out areas on Yukon and Elizabeth islands, and other bays and shorelines throughout Kachemak Bay and as far east as Port Dick.

Nearly eighty years after severe depletion of sea otter numbers throughout its range, protection of this species has brought it back harvestable numbers. In some locations it competes with humans for shellfish resources such as clams, and crabs. In addition, in 1988 The Alaska Sea Otter Commission was formed to promote the Native participation in resource policy decisions affecting sea otters and their uses. Harvesting of sea otters is managed by the U.S. Fish and Wildlife Service. Any harvest requires the animal be recorded and tagged with a metal tag. Most communities with sea otter hunters have individuals responsible for the recording and tagging of the harvest.

In the early 1980s, village hunters estimated that each community took between 40 to 100 seals and 4 or 5 sea lions annually. In 1983, Nanwalek hunters took about 50 seals and 3 sea lions. Harvests of marine mammals vary from year to year because of a variety of factors, such as the size of the animal populations, weather, and other activities of the most active hunters. In 1982, for example, the majority of the marine mammal hunters in Nanwalek were employed in new housing construction during most of the summer and fall. Seal harvests were lower than would be expected if the hunters were not working. In the mid 1990s populations of harbor seals and, especially, sea lions, were low. The western Alaska population of sea lions was listed by the federal government as endangered in 1997. Hunters from both communities have reported scarcities and difficulties in finding animals of both species.

Recent estimates of subsistence harvests of harbor seal and sea lion by Nanwalek and Port Graham are reported in Figure 25 and Figure 26. No long-term trends in harvest levels are indicated by these data, although several observations can be made. Harvests were notably low in 1990, the second

year after the *Exxon Valdez* Oil Spill. This may be related to reluctance on the part of village residents to eat marine mammals because of concerns about oil contamination. Harvests in both communities rebounded sharply in 1991, but have declined slightly in the last few years due to scarcity. However, these data contain no indication that interest in hunting and using seals and sea lions for subsistence is declining in either village. To the contrary, these remain among the most popular and valued of subsistence foods. Indeed, because they are so highly valued for their taste and nutritive qualities, marine mammal meat and other parts are among the most widely distributed subsistence resources in Nanwalek and Port Graham (see Table 8 and Table 9, above). Distribution of meat, fat, and internal organs includes virtually every household in the two villages. Examples of how two hunting parties distributed their seal kills are presented in Figure 27 and Figure 28. In the first case from Nanwalek, two cousins (from households 3 and 7) shot a medium-sized seal. The two men split the seal equally and in turn shared their portions with other relatives. Most of the fat, flippers, and lungs went to elders in households 4, 5, 6, and 8 because they always request these parts. Elders were also knowledgeable in preparing these parts into foods, and greatly enjoyed the taste and the work involved in the preparation. The two brothers and father of the hunter from household 3 (households 1, 2, and 4) received ribs, fat, and roasts. In total, 8 households with 25 people shared in this seal harvest.

Figure 25. Subsistence Harvests of Harbor Seals and Sea Lions, Nanwalek

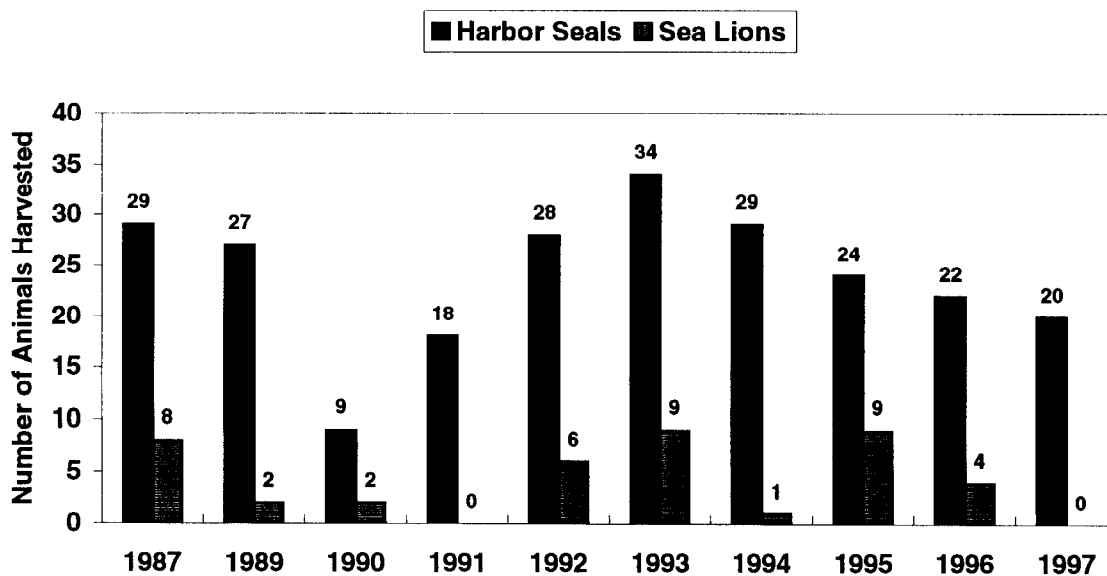
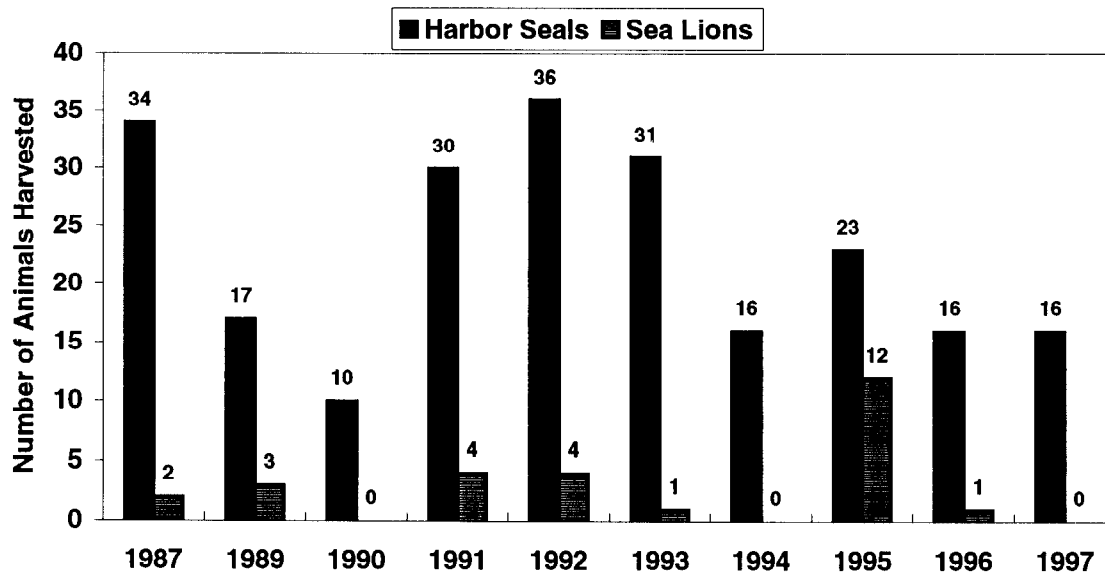


Figure 26. Subsistence Harvests of Harbor Seals and Sea Lions, Port Graham



The second example illustrates the distribution of seal among a kinship network in Port Graham. In this example, seal products were distributed among 16 households and 45 people living in Port Graham, Seldovia, and Nanwalek. There were two hunters (brothers-in-law), from households 3 and 15. When they harvested a seal, each gave away products to 3 or 4 households in the network. When the next seal was harvested, a different set of households in the network received some of the meat, fat, and other parts.

The number of households receiving seal from a hunter depends upon the frequency of seal harvests and the number of people in the hunter's extended family. If a hunter has many close relatives, one seal does not go very far to meet the extended family's needs.

Generally, hunters field dress seals and sea lions cutting them into smaller pieces for distribution. Beyond this initial preparation, women prepare seal products. Sometimes, the entire animal is delivered to the hunter's wife or another woman in the extended family for butchering and distribution.

The fat of harbor seals is a highly valued product and used in various foods. Fat is rendered into oil by placing it in a jar and letting it stand for several days indoors. It is used in *akutaq* ("Eskimo ice cream"), and with dried salmon and halibut.

Seal and sea lion meat is usually cooked as roasts, fried, or made into stews. Internal organs are prepared into several traditional dishes. Lungs are stuffed with pieces of fat, meat, and vegetables and then baked. The liver, kidneys, and hearts are also used. Flippers are given to older people who have the time and knowledge of their preparation, a lengthy process of singeing and scraping the hair and skin and then baking. Intestines are stuffed with fat, meat, and vegetables, braided and then baked.

Land mammal species that are used for subsistence purposes in Nanwalek and Port Graham include moose, mountain goat, and black bear. A few hunters who specialize in hunting these species generally take them in small numbers. Until the recent past, hunting was done on foot, or hunting areas were reached by skiff or commercial fishing vessels. Today, hunters also utilize logging roads to access harvest areas. Harvests of these resources are widely shared (see Table 8 and Table 9, above).

Black bears are hunted in the spring and fall when bears are feeding on fresh, green vegetation and berries. Spring hunting takes place along shorelines that are easily accessible by skiff and on foot. In fall, bear hunting takes place in conjunction with moose hunting. Black bear meat and fat are highly valued and thought by some to be about equal to seal in food value. The meat is cooked in roasts and stews, and ribs are much favored. Bear fat is considered the very best type for baking and cooking after it has been rendered into lard.

Because bear products are in high demand and black bears are relatively abundant, sharing among hunters' families and friends is extensive. Figure 29 illustrates sharing black bear by a Nanwalek hunter. Seven households with 25 people shared the harvest. Bear hunters try to harvest several bears each season in order to meet their own households' needs as well as those of other community members. Initial sharing of the kill occurs between hunters and their partners, with secondary distribution to friends and relatives. With the relatively small amount of meat gotten from one bear (about 60 pounds), distribution of a single bear's meat usually does not extend to many households. Subsequent bears are given to people who had asked for meat or fat and did not receive any from previous harvests.

Contemporary black bear hunting in Nanwalek and Port Graham illustrates some aspects of the traditional Alu'utiq belief system regarding relationships between humans and animals. Traditionally, the Alu'utiq believed everything has a spirit, which can be harmful, if people behave improperly. For example, in the mountains, people are not supposed to sleep, defecate, or urinate in tundra areas because this is offensive to bears. If a hunter violated this rule, a bear might kill him while he slept. Consequently, hunters defecate in steams so that wastes are washed away. Also, historically and to some extent today, hunters believe that the skull of a bear should be left where the bear was killed, facing south. This will

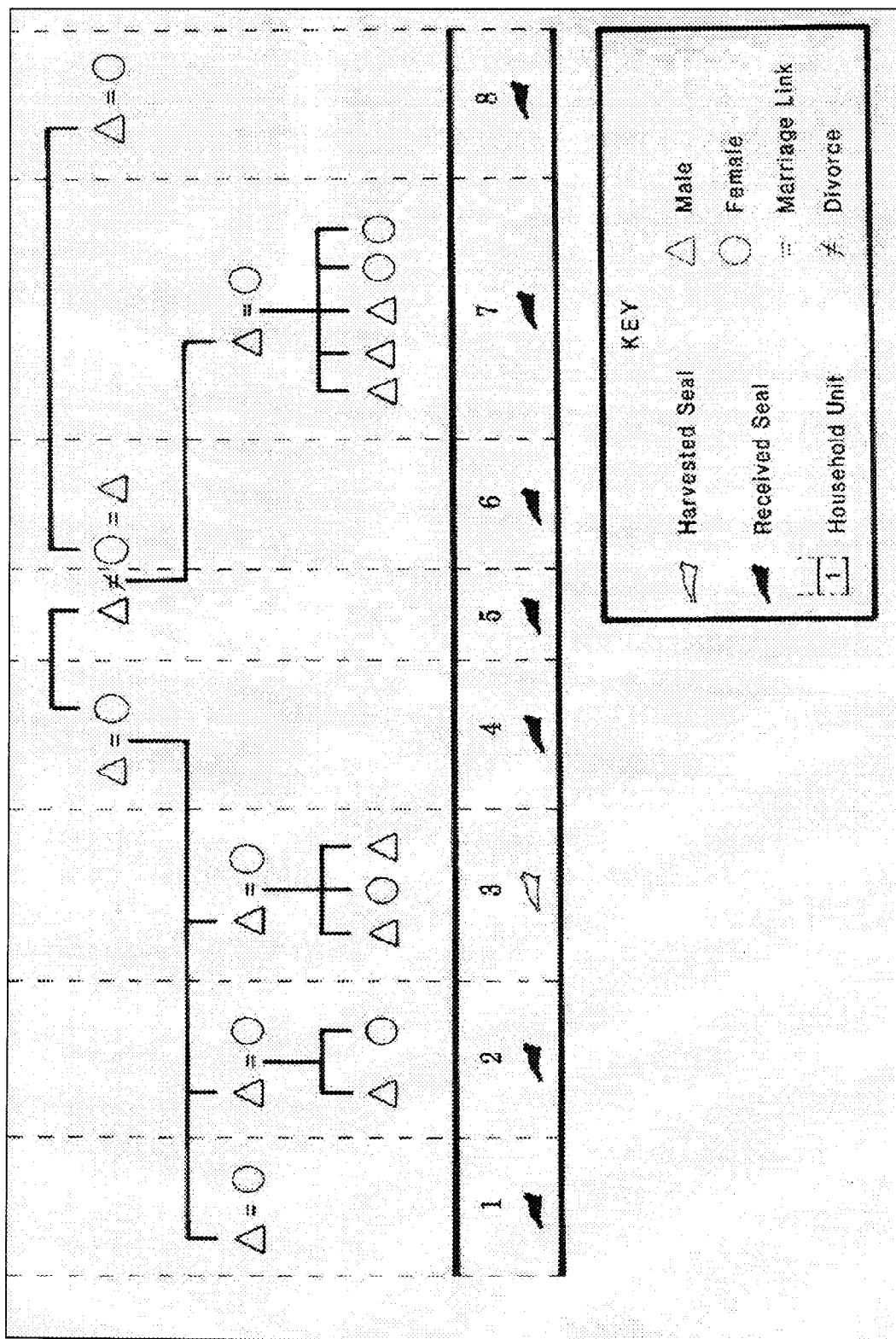


Figure 27. An Extended Family Unit which Harvested and Shared Seal in Nanwalek.

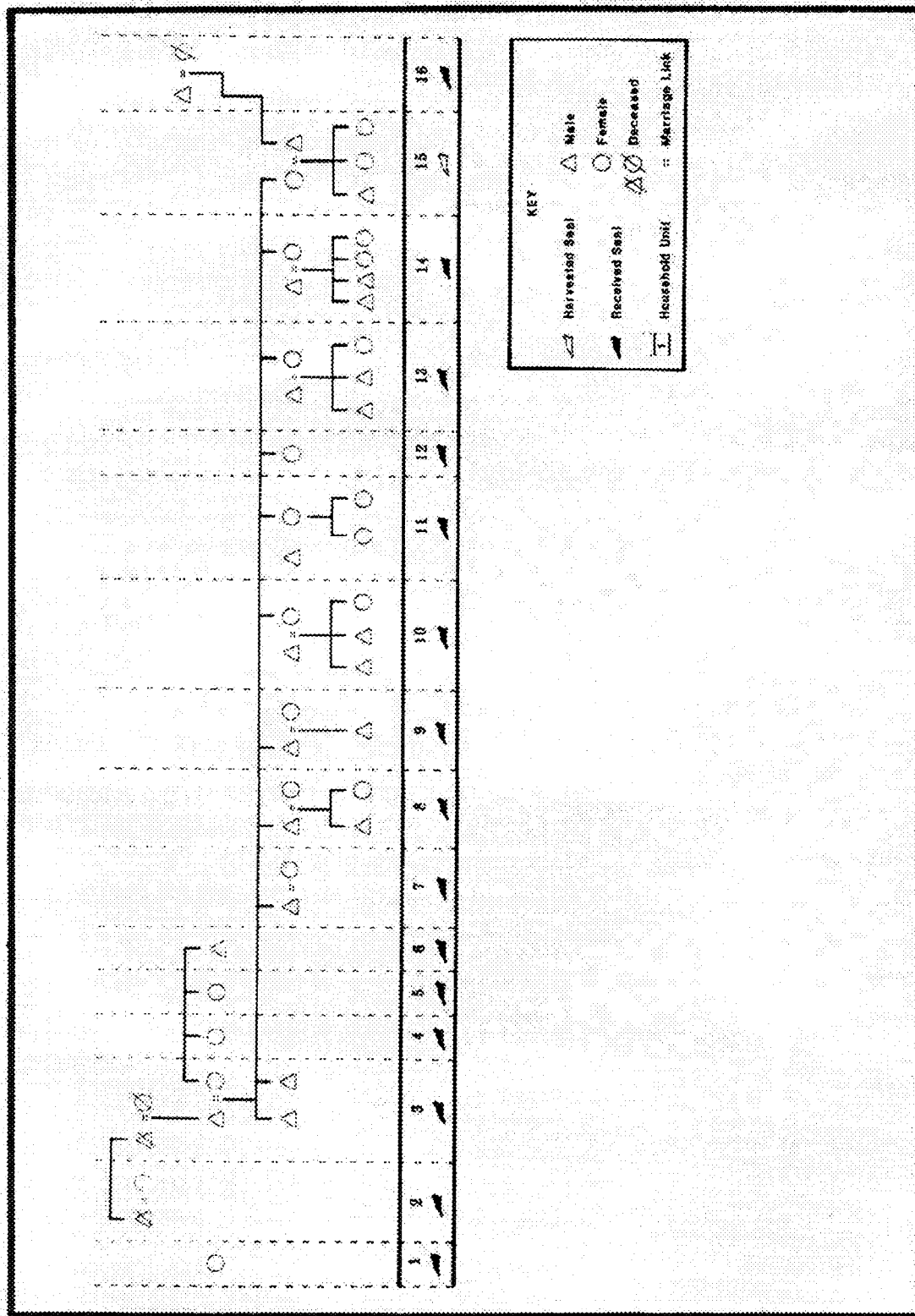


Figure 28. An Extended Family Network for Distribution of Seal by a Port Graham Seal Hunter to Households in Nanwalek, Seldovia, and Port Graham

assure that more bears will return for hunters to harvest. Some black bear hunters also remove the sternum from the bear before they return to the village with the carcass. If this is done, the bear will not be able to harm the hunter in the future. Yet another traditional belief is that a man whose wife is pregnant should not hunt bears.

Residents of Nanwalek and Port Graham use a variety of birds and eggs for subsistence purposes. Traditionally, waterfowl and marine birds were taken year-round. Generally today, hunting activities correspond to the birds' migratory movements. Hunting begins in late September when ducks have moved into shoreline areas, small bays, streams, and open lakes. They are taken through December, with some harvest as late as March or April. Gulls and other seabirds are taken in the spring at concentration areas when they are still fat.

Residents of both communities gather the eggs of gulls, puffins, and murre in the spring. Generally, egg gatherers take only one egg from each nest. Sometimes, they are collected on special trips, with harvest groups composed of families with men, women, and children. On some occasions, egg gathering takes place in association with bear or seal hunting, plant gathering, and social or business trips to other communities. Eggs are widely shared with people who are not able to harvest them. They are highly regarded for baking breads, cakes, and pastries. Eggs are also eaten fried and served hard-boiled at family gatherings.

Today, the people of Nanwalek and Port Graham use many plant species for food, medicines, raw materials, and fuel. Most plants are harvested near each village. Eight species of berries are gathered from June through September. They are made into jams, jellies, and sauces; baked in breads, cakes, and biscuits; or eaten plain or mixed with sugar. A variety of green plants are used for food, including wild parsley, wild onion, goose-tongue, wild celery, ferns, fireweed, nettles, seaweed, and kelp. These plants are harvested in the spring and early summer when their parts are young and tender. Their uses are as ingredients in soups and salads, and flavorings for fish dishes.

Wennekens (1984) provides details on the medicinal uses of plants in Nanwalek and Port Graham. A frequent use of such plants as yarrow, tundra rose, devil's club, Bethlehem Star, and sweet coltsfoot is as teas to treat ailments such as sore throats, arthritis, and colds.

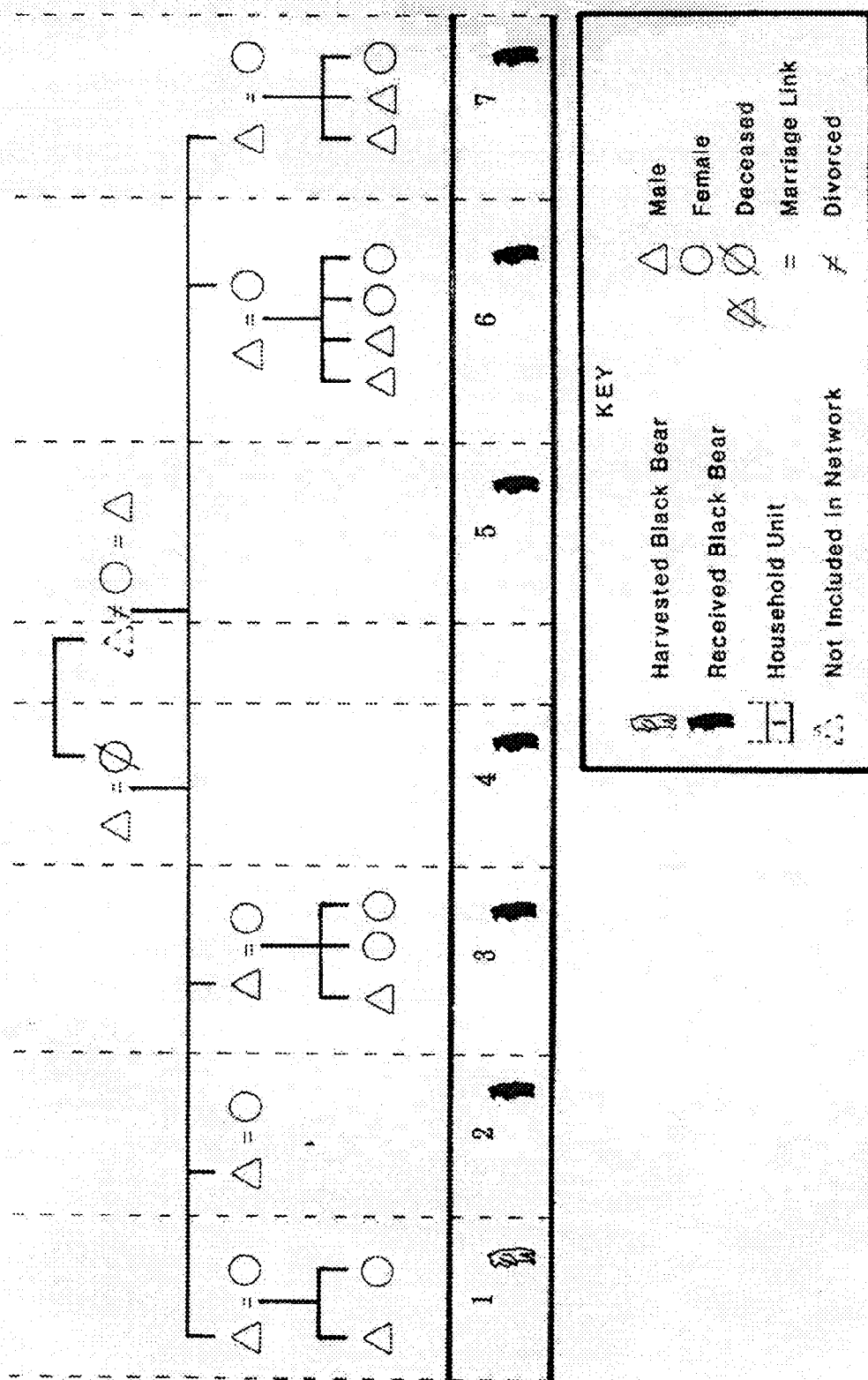


Figure 29. An Extended Family Unit Sharing Black Bear Harvest in Nanwalek

OVERVIEW OF SOCIOCULTURAL CHANGE AND RESPONSES TO CRISES

Natural Disasters

Epidemics

Mention was made in chapter one of the impacts on the Alu'utiq population of diseases brought by Euro-Americans. Influenza in the late 1800s and early 1900s drastically reduced the Native population. While medicine greatly improved the health of the Native populace, accidents still exact an unusually high toll among most Native communities in Alaska, and Port Graham and Nanwalek are no exception. In the 1990s the AIDs virus has found its way into the village population and is a major health issue in Nanwalek and Port Graham.

Volcanic Eruptions

Tectonic movement is nothing new to the North Pacific Rim and the lower Kenai Peninsula. A number of volcanic eruptions have effected the lower Cook Inlet area over the centuries. Eruptions in the 1800s did deposit large amounts of ash, but not to the extent of forcing evacuations as with the Katmai villages and other Alaska Peninsula communities. Mt. Augustine volcano about 50 miles west of Port Graham and Nanwalek has threatened those two communities on several occasions. In 1884 ash fallout has covered the area and a large tidal wave reached Nanwalek, but the tide was at its low point and no damage was done to the village. Mt. Augustine again erupted in the 1980s and about one-half inch of ash fallout covered the villages. No damaging effects occurred and talk was that in a few years the salmonberry crop would be very good as a result of the nutrients deposited by the ash.

Earthquakes and Tsunamis

Another result of tectonic activity has been earthquakes and tidal waves. Earthquakes have caused major shifts in the earth's crust on the lower Kenai Peninsula. In recent history, the 1964 Great Alaska Earthquake caused land subsidence on the lower peninsula. Land around Nanwalek subsided several feet, damaging homes around the lagoon. Although little research exists, there is strong evidence that land movements effected spawning habitat of salmon along the lower Kenai Peninsula, this in turn resulted in diminished fish returns and unmeasured impacts to the fishing industry and subsistence uses. This is especially true for intertidal spawning fish like chum and pink salmon. Although the 1964 earthquake caused damage to homes in both communities, no lives were lost and only a small tidal wave reached the area.

Development

Fur Bearer Trapping and Marine Mammal Hunting

Depletion of the sea otter resource in the early 1800s lead to over-exploitation of land furs in the later part of the century. Furbearer trapping on the outer Kenai Peninsula ceased. Under territorial government, bounties were paid for harvest of predatory animals. Species such as eagles, harbor seals,

beluga, and Dolly Varden were killed and their parts turned in for cash payment. A number of Port Graham and Nanwalek residents participated in seal bounty hunting in the 1940s and 1950s. Many residents recall receiving a nickel each for Dolly Varden tails and collecting cash for eagle talons. Unfortunately, some bounty practices instilled an unsympathetic attitude toward some wildlife species and these ideas persist to the present.

Commercial Fisheries

Following the collapse of the fur trade, the commercial fishing industry boomed in the Gulf of Alaska. Fishing became the life-blood of the cash economies of most coastal communities. However, over-exploitation caused devastating results wiping out the Kachemak Bay herring population in the late 1920s and the crab populations in the 1950s and 1960s. Neither the herring nor the crab recovered to commercially viable populations. Commercial salmon fisheries have struggled to sustain themselves in the face of extreme fluctuations in annual salmon returns. The 1964 Great Alaska Earthquake altered intertidal spawning habitat for some salmon species. The commercial fishing industry has declined dramatically in the past 20 years with most of the permits being sold outside the villages. Enhancement efforts have met with mixed results with some extremely good return years and other disastrous ones. After its closure in 1989 and renovation in 1997, the Port Graham cannery had one good year of operation and then burned in 1998. In 1999 a new cannery was constructed in Port Graham and is scheduled to go on line in the summer.

Logging

A number of logging projects have taken place in the vicinity of Port Graham and Nanwalek. One of the earliest was in the 1970s on the outer Kenai coast near Windy and Rocky bays. When the harvest began it was administered by the State of Alaska, but the lands were later transferred to the Port Graham village corporation. Port Chatham was logged in the 1970s, but unfortunate financial circumstances put the English Bay Corporation in a lawsuit over payment for timber cut but never removed. Following the oil spill in 1990, the English Bay Corporation sold timber to a company which logged Koyuktolik Bay and part of the English Bay River valley. This was a successful helicopter logging operation. Unfortunately the price of timber dropped, forcing the logger to pull out. In the late 1990s the Port Graham Corporation sold timber in the Port Graham valley to Klukwan Timber Incorporated. A road was constructed from Port Graham to Windy Bay and a considerable amount of timber was removed from Corporation lands. For many years the BIA attempted to develop logging contracts on Native allotments in the vicinity of the villages. To date, only a small amount of timber has been removed. Plans are being made to coordinate with the next logger, Aloha Timber, to cut on allotments near Port Graham when this company begins harvesting logs on a new contract with the Port Graham Corporation. During the most recent logging contracts, local hire provisions were negotiated to hire and train local workers. The tendency was for logging contractors to bring in their own trained workers and not hire

village residents. Subsequently, village residents have worked in many capacities on the logging projects including heavy equipment operators, oilers and fuelers, stevedors, and a variety of labor jobs.

Tourism

Although tourism and recreational activities are very common in the vicinity of the two communities, there is little direct involvement by Port Graham. The English Bay Corporation in Nanwalek renovated a former logging camp at Koyuktolik Bay and leased it to a concessionaire for recreational hiking and fishing activities. However, there is considerable reluctance to become a focus of tourist activities by inviting tourist presence in the villages. Experience from the 1960s and 1970s created bitter sentiment in Nanwalek when non-local fishermen's private aircraft lined the gravel runway and fishermen competed with villagers for red salmon in the English Bay River. The village took measures to stop the influx of anglers and the activity has ceased. It isn't very appealing to most residents to have strangers wandering around the village taking pictures and watching what residents are doing. To a small degree the bed and breakfast businesses in Port Graham have been a venue for tourists to access the communities, however, most of the bed and breakfast has been with people on business in the community.

Oil Development and Oil Field Production

Nearly all efforts to lease oil and gas tracts in the lower Cook Inlet have met with vehement opposition from residents of both Port Graham and Nanwalek (see for example testimony provided in October 1980 by village residents at public hearings on lease sale 60 in Homer) were notable in the observation made by the subsistence users that:

A crucial impact that the DEIS does not address is the comprehensive effect of an oil spill on the subsistence resources. It breaks everything down, and suggests how oil would [e]ffect the individual resources, but it does not spell out the fact that a major spill would critically effect all of the crucial subsistence resources. There are virtually no alternative resources for the villagers to turn to, as big game is scarce in the area. This past winter, English Bay residents noticed that even the tomcod, which they use in the winter, disappeared when there was an oil spill in the lagoon from the school oil storage tanks.

Further testimony at the 1980 hearings reveals some of the values of this community relative to the incursion of outsiders.

English Bay has consistently avoided development and invasion by outsiders over the past few decades. It wants to stay the way it is. This is reflected by its efforts to prevent a road built between it and Port Graham. And they are our relatives in the neighboring village. By the fact that English Bay holds on to its young people, they either stay, or they come back to English Bay to raise their families. They prefer fishing to skilled jobs which take them away from the village. If their past history is a clue to the future, few if any of the people will seek employment on rigs. Oil development will not bring more money into the village. It will only accelerate the rate of inflation in Homer, and bring more people to the Cook Inlet to use the same resources. Therefore, it is not surprising that the entire village, including the English Bay Corporation is opposed to any further leasing in the lower Cook Inlet.

Opinions regarding the effects of oil spills and development on the lives of community residents, especially with attempts to mitigate any losses of subsistence resources expressed the following,

...in making the determinations of the value of subsistence foods and the cost of replacing them are self-evident. It will be no easy task to make such assessments. It is worth noting that the whole process is very liable to have negative effects of its own on the villages. Not only will giving people money, or food stamps, or substitute foods not restore the pride and satisfaction of having harvested it themselves, but it also cannot compensate for the interruption of the whole relationship of the people and the environment. It produces stress. Although stress is not something you can easily measure, it is not an effect to be overlooked. It is what you experience when the freezer is getting close to empty and you cannot go out and get a seal, or some tomcod or a few ducks. It is what you feel when your whole way of life has been disrupted, and suddenly people are asking you what you eat, and how much, and telling you what you can have to get by for the next few months of few years.

Man-made Catastrophes and Their Aftermath

1987 S.S. Glacier Bay Spill

In July of 1987, the *Glacier Bay* spilled between 56,700 gallons and 154,600 gallons of North Slope crude oil in Cook Inlet (USCG 1988), however, extensive impact studies were never conducted. Residents of Nanwalek recalled seeing the spills effects on a variety of waterfowl and marine birds which washed up along the shoreline near the villages and took refuge in the English Bay Lagoon. Some people tried to capture the live, injured birds, but weren't sure what caused their condition so were reluctant to use the birds as food. Oil was found on the birds' feathers and some oiled birds were turned in to authorities, but definitive identification of the contaminant was not made.

Exxon Valdez Oil Spill

In March 1989, the *Exxon Valdez* went aground on Bligh Reef in Prince William Sound and spilled 11 million gallons of North Slope crude oil. Initial reactions of Port Graham and Nanwalek residents were to go to the Sound and help clean up the oil. The thought did not occur until later that the oil could eventually land on the doorsteps of the two villages, it was only how they could help their neighbors and relatives in the communities near where the oil spilled. Within a week after the spill, it was clear the oil might find its way to Cook Inlet, carried on the tides and ocean currents which moved along the outer coast of the Kenai Peninsula. Following the spill, extensive sociocultural studies were conducted in both communities (Fall and Utermohle 1995; Fall 1999) Results from those studies are reported in this and the above mentioned reports. In addition, a study 10 years following the spill was conducted in the winter of 1999 (Fall 1999).

Oil Spill Restoration

Projects intended to restore subsistence uses injured by the *Exxon Valdez* oil spill are on-going in or near the two communities. Several projects are intended to rebuild the abundance of certain

resources. In Port Graham bay and near Nanwalek the Chugach Region Clam Restoration (\131) is designed to reestablish the local population of littleneck clams. The Port Graham Pink Salmon Project (\225) will supply pink salmon for broodstock development at the Port Graham hatchery. Five years of funding for the project are anticipated. Port Graham Stream Enhancement (\263) calls for funding the study of four local streams for enhancement possibilities.

The following projects are intended to increase subsistence users' involvement in the restoration process. The Community Facilitators project (\052A) funds community facilitators from communities throughout the oil spill area, to facilitate communications and interaction among the Council, scientists, and community residents. This project will extend throughout the life of the project. The Community-based Harbor Seal Management project (\244) funds the Alaska Native Harbor Seal Commission to train seal hunters in each community to collect biosamples from seals harvested for subsistence use. Their involvement encourages an exchange of information between hunters and scientists and greater participation by the communities in management activities.

Other projects (Traditional Ecological Knowledge (\052B) project and Food Safety Testing (\052) encourage the involvement of youth and elders in workshops to exchange traditional knowledge about the environment between elders and younger generations, and test wild foods for possible contamination.

CONTEMPORARY LIFE IN NANWALEK AND PORT GRAHAM

Living in Nanwalek and Port Graham in the 1990s for the average household is very much focused around the nuclear and extended family. With relatively young populations, raising and educating children is a focus of most households. During much of the year the day begins with getting children to school or daycare, and caring for pre-school children at home. Some young parents who work must arrange for caregivers through daycare programs, hiring baby sitters, or exchanging caregiving with relatives or friends. Households with one parent working may have the second remaining at home performing all the daily tasks of housekeeping and caregiving. Visiting with relatives or other families is usually included in the day's activities, along with a trip to the store for supplies or social visits.

If you have a full-time cash job you might be a village government employee, a teacher, or a store worker. Most jobs, however, are part-time on projects such as housing repair, utility service or maintenance, labor, cannery work, or road repair. In recent years a logging project and upgrades to the cannery generated a number of seasonal labor jobs in Port Graham. Thus, people worked as truck drivers, equipment operators, stevedores, and carpenters. Winter months are a very slow period for part-time workers, while warmer weather allows for getting to otherwise impossible tasks. Spring and summer are particularly hectic times with a myriad of activities including subsistence and commercial fishing, building projects, and attending to children out of school. Many people try to put up the year's supplies of red and king salmon in the month before commercial fishing and cannery work begin. Fortunately, the longer daylight periods seem to be made just for those people with too much to do.

A typical summer day in the life of an average household might include getting up early to check a subsistence salmon setnet and bringing in any salmon caught during the night. These would be brought home, cleaned, and prepared for preservation by smoking, freezing, or drying. One or the other parent would prepare themselves for work. Depending on the job, they could have an 8:00 am or 9:00 am-starting time. Usually, mom would fix breakfast unless the kids and others didn't get up until late in the morning, then they would be helped by whichever parent was still home. Depending on the age of the kids, they might watch television, play with toys, or go outside to play with other children, or help put up fish.

Youth in their teens usually have summer work programs where they can work part time on a variety of community projects such as grounds beautification around the church, trash pick up, or helping elders with work at their homes. Teenagers also help as commercial fishermen, and work at the cannery. Like teens elsewhere, those from Port Graham and Nanwalek share interests in the latest fashions, music CDs, social events like dances, and riding around on their four-wheelers.

In recent years, the fisheries enhancement project for the English Bay River hired a number of Nanwalek residents to construct a weir in the river, count out-migrating salmon smolts and returning adults, construct pens for holding young and adult salmon at Second Lake, and catch returning adult salmon for cost recovery. The hatchery in Port Graham has provided year round jobs for a handful of people to construct the hatchery and attend to rearing of pink, coho, and sockeye salmon eggs and fry.

Commercial fishing and cannery work occupy the summers of many people in both communities. Fishermen in the two communities fish in Cook Inlet or Prince William Sound for salmon, halibut, or herring. From time to time a few commercial fishermen go to the Bering Sea for crab or the Alaska Peninsula for salmon. Getting up early in the morning, working until late in the evening, waiting for the tide, mending nets, picking and unloading fish, and repairing boat equipment are seemingly endless tasks. A few fishermen who setnet near the villages have relatively easy routines of going out in skiffs, picking fish from the nets, and delivering fish to the cannery or tender. Those who travel in seine boats to distant fishing grounds may spend a week or two on-board their boats. While locating fish, setting a seine net, pursuing it in, and brailing fish is often a hectic job, there are also idle times used for resting, mending gear, or gathering subsistence foods.

Summer is also a time when people find the opportunity to travel outside the community for shopping or visiting friends and relatives. Most people travel to Homer, Kenai, Anchorage, and Seward while a few make it outside the state to Seattle or other locations.

For those people running village government and community services, life presents a particularly unique set of challenges. A large amount of the business of governing the community and providing essential services entails dealing with bureaucrats in borough, state, and federal governments. This involvement demands travel outside the community, and this typically requires several days or weeks of being away from home. Leaving and returning to the village requires flying in small aircraft or sometimes traveling in a boat or skiff. Weather, pilots, and equipment are always issues of concern to the traveler although none of these are within their control. Spending time away often causes stress on

parents as well as the children. The duty of leaving town for meetings of government or corporation business often falls on those without intensive family obligations.

By the end of summer the focus of harvesting fish changes to hunting mammals such as bear, goats, and moose and fishing for silver salmon. For the majority of the community too, activities focus around the school and the daily routine of getting kids up and off to school, and being ready for their return home at the end of the day. As colder weather sets in wood gathering becomes a priority, although many households have converted to high efficiency fuel burners. Wood is still cheaper than fuel and supplements most households' heating. School projects and after school activities occupy the time of most students and often require the help of parents. Computers have become commonplace in the schools in both communities and are very popular among the students. In mid October the Alaska Federation of Natives annual meeting has become an important event attended by many Port Graham and Nanwalek residents. Dance groups from both communities usually perform at ceremonies in Anchorage, as does the English Bay Band.

When the holidays approach in mid winter, almost everyone is busy preparing for special events at the schools and churches, and in the communities at large. While the majority of people in both communities celebrate their holidays in the Russian Orthodox tradition, some in Port Graham follow more western holiday practices. A few people take joy in honoring both traditions.

Winter weather in and of itself is a problem to be reckoned with. Snow plowing and shoveling, negotiating icy roads, keeping stoves and furnaces operating, and traveling in marginal conditions are all daily challenges of winter months. However, if the days seem somewhat confining they also provide opportunity for visiting with friends and relatives and catching up on household projects left over from the previous summer.

Although the two communities are not connected to the highway system and larger communities by roads, they have most modern conveniences and facilities. Since most homes have been built or remodeled in recent years, they are quite comfortable. Most households have televisions, VCRs, stereos, and other electronic equipment. Even though their isolated location precludes the crime and hustle and bustle of large communities, there are many other social problems brought about by the rapidly changing culture and modern conveniences, which often break down the traditional social systems. For this reason, many people have found the greater variety of choices in services and large schools in urban communities a desirable way of life. For the majority, however, family ties, quiet surrounding, ready access to fishing and hunting, and a good place to raise children are all reasons for remaining with, or returning to, life in Nanwalek or Port Graham.

CHAPTER VII: SUMMARY DISCUSSION AND CONCLUSIONS

Information in this report has demonstrated a genealogical connection between contact and post-contact period Unegkurmiut and the current residents of Nanwalek and Port Graham. The Unegkurmiut were one of nine subgroups of Chugach Alu'utiq. They inhabited the coast of the outer Kenai Peninsula roughly between Resurrection Bay and today's Nanwalek and Port Graham. In the mid 1780s, the Russian fur trade exploited the sea otter in Cook Inlet, along the outer Kenai Peninsula Coast, and in Prince William Sound. The Unegkurmiut mingled with other ethnic groups of European, Aleut, and Koniag ancestry. For over 100 years, most Unegkurmiut intermarried with these groups, and many succumbed to diseases. With the establishment of trade centers at Nanwalek, Nuchek, and Cape Douglas, Native people living in semi-permanent settlements along the outer coast congregated in permanent villages at or near the centers. In so doing, they left most of their ancestral territory along the outer Kenai Peninsula, moving to the southwestern end of the area. This emigration was driven by a growing dependence on a mixed cash and subsistence economy and a devotion to the Russian Orthodox religion.

After moving away from most of the outer coast in the 1880s, the Unegkurmiut ancestors of today's Nanwalek and Port Graham people continued use of their traditional territory through seasonal hunting, trapping, and fishing activities. They occupied many of the same settlement and camp locations that had been used since the time of contact into the early 1900s. When the sea otter resource was over-exploited and the harvest of otters banned, other land furs and farmed fox were harvested to supply the market. When the fur market collapsed in 1897, trappers were unable to repay debts of extended credit and had to seek other sources of cash. One of these, which became the most important to Nanwalek and Port Graham, was the commercial fishing and processing industry. Salteries and canneries were established in the late 1800s and early 1900s by some of the same companies that had run fur trading posts.

Work in the canneries required an extended commitment of time during the summer months when most Natives were involved with putting up annual supplies of subsistence foods. Along with the canneries came the demand for timber in construction of fish traps and buildings. Logging became a small seasonal industry of its own. With their involvement in the fishing industry, local fishermen were able to make enough cash to purchase the supplies needed for the rest of the year. This alleviated the need for winter fur trapping, and basic needs for fish and red meat could be met through local subsistence activities and small purchases from the store. By the 1940s and 1950s, travel to the outer coast was by commercial fishermen and marine mammal hunters. These people, who had traveled the outer coast in their youth with their parents and grandparents, were, of course, very familiar with the area.

In 1971, when Alaska Natives had the opportunity to select land under ANCSA, residents of Nanwalek and Port Graham understandably chose their ancestral lands along the outer Kenai Peninsula in what is now Kenai Fjords National Park. In the vision of elders who have since passed away, these lands were for future use to sustain the generations of descendants of the people who once occupied that area. This vision is being fulfilled today in two different ways. Port Graham residents who hold shares in the

village corporation have chosen to retain these lands for future use. They foresee someday using the area for subsistence hunting, fishing, and gathering, and for other cultural and educational activities. In contrast, Nanwalek residents look forward to returns on their corporation's investments of money it has received in exchange for their former in-holdings with the park.

Cultural continuity between current Nanwalek and Port Graham residents and the Unegkurmuit of the outer Kenai Peninsula coast has prevailed despite the extreme pressures and dramatic changes brought about by contact with other cultures. Oral traditions continue to be a means of passing on details about ways of living and changing to meet the demands of the modern world. In this regard, Nanwalek and Port Graham residents have demonstrated a high degree of ingenuity and adaptability by accepting and using those aspects of modern and non-Native culture which meet their needs. The large number of Sugcestun speakers in both communities ensures many Alu'utiq traditions will be taught and passed on to future generations. In addition, high levels of wild foods usage, harvesting and preparation in both traditional and modern ways, manifests the communities' strong affinity with their homeland and its natural resources.

In Nanwalek and Port Graham, there clearly are two sectors of the economy, cash and subsistence. Each sector is made up of parts such as commercial fishing, teaching, services, government, transfer payments, and dividends in the cash sector. Most of these elements are highly dynamic in the amounts of cash they provide annually and over the lifetimes of households. Some individual people become highly specialized in the type of work they do, and closely tied to a particular source of cash. Others are flexible, changing their skills with whatever becomes available. The same can be said for the community as a whole. Some communities are highly diversified and able to make a living on whatever becomes available. The later is certainly true of Nanwalek and Port Graham through their histories. From the time of their distant ancestors who, from the time before European intervention, lived in a complex subsistence economy, to the current residents who live in a complex mix of cash and subsistence. Adaptability has been key to their survival. For individual households, over periods of years, each sector plays varying degrees of importance. How dramatically the household or the community is affected by the removal of particular cash or subsistence components depends on how big a part that component played in the long-term.

When compared to subsistence, the cash sector of the two communities has become of increasing importance over time. Initially, Europeans created a desire for trade goods, such as metal, sugar, tea, and cloth through their demand for furs. What started as more or less curiosities, grew into necessities as many of the introduced items replaced local counterparts. As cash was eventually introduced as a trade item, so were many goods for which it could be traded. Gathering furs and other resources to trade for cash went from a seasonal activity to almost full-time. Eventually, stores became stocked with essential items of food and clothing and people's time was spent getting the cash to trade for the essentials instead of making or harvesting the essentials themselves. However, cash never quite replaced the need to harvest

wild resources, because it wasn't stable enough and couldn't provide for all the local needs. So it is today that cash and subsistence together form a complex interrelationship.

Although this report presents a considerable amount of information about the history and contemporary life of people in Nanwalek and Port Graham, it should not be considered the final word, but rather a good beginning a telling the story. Many subject areas could be widely expanded. Much more work should be done on family histories compiling genealogical information and family photographs. Greater use could be made of the oral interviews done by school students in both communities in developing certain topical areas. The tapes along with personal photographs and information about their topics should be digitized and compiled by school students with the use of computers. This would not only make the information readily available to the communities but also provide a long-term preservation. The archaeological record is in great need of research all along the coast of the lower Kenai Peninsula. This would help answer many questions about the timing of occupation and life ways of village ancestors.

Other issues which could be addressed in greater depth include the relationships between the cash and subsistence sectors of the local economies. Clearly, if the cash sector of the local economies were totally removed today, not only would be subsistence sector not function the way it does today, but the entire community would likely cease to exist. However, it rarely happens that an entire sector of the economy is suddenly removed from a community, rather it is a gradual process whereby elements, such as commercial fishing or logging gradually diminish or occur periodically over time. In Nanwalek and Port Graham fishing and logging have played important economic roles over time. Their respective importance has been tied to prices of seafood and wood products and world demand for those products.

In the case of employment related to the Exxon Valdez oil spill, incomes and the number of people employed were exceptional, as a cash source it was incomparable to any other one-time cash influx such as road construction, or home remodeling. Its impacts were long-lasting in terms of tax burdens, commodities purchased, facilities funded by spill settlement money, and social change.

REFERENCES CITED

- Albatross Reports and Correspondence, March – December 1893; Annual Report for Year Ending June 30, 1892. Box 3 of 7. National Archives, Washington, D.C.
- Anahonak, Dick
1997 Personal communication. Port Graham, Alaska.
- Arnold, Robert D.
1976 Alaska Native Land Claims. Anchorage: The Alaska Native Foundation.
- Bancroft, Hubert Howe
1886 The History of Alaska 1730 - 1885. San Francisco: A. L. Bancroft and Company.
- Barry, Mary J.
1973 A History of Mining on the Kenai Peninsula. Anchorage: Alaska Northwest Publishing Company.
- Beaglehole, J.C. editor
1967 The Journals of Captain James Cook on His Voyages of Discovery. Volume III: The Voyage of the Resolution and Discovery, 1776-1780. Cambridge: University Press.
- Birket-Smith, Kaj
1953 The Chugach Eskimo. Nationalmuseets Publikationsfor, Ethnographisk Raekke 6. Copenhagen.
- Bower, Ward T.
1919 Alaska Fisheries and Fur Industries in 1918. U.S. Bureau of Fisheries, Document No. 872. Washington, D.C.
- Black, Lydia, trans. and ed.
1977 The Konyag (The Inhabitants of the Island of Kodiak) by Iosaf [Bolotov] (1794-1799) and by Gideon (1804-1807). Arctic Anthropology 14(2) : 79-108.
- Braund, Stephen R.; and Steven. R. Behnke
1980 Lower Cook Inlet Sociocultural Systems Analysis. Alaska OCS Socioeconomic Studies Program Technical Report No. 47. Minerals Management Service. Anchorage: U.S. Department of Interior.
- Burch, Ernest S.
1984 The Land Claims Era in Alaska. *In* Handbook of North American Indians: Arctic. Vol. 5 D. Damas, ed., pp. 657 - 661. Washington, D.C.: Smithsonian Institution.
- Bureau of Indian Affairs
1943 – 1965 Village Food Surveys. English Bay and Port Graham. National Archives, Anchorage.
- Carlough, Victor
1997 Personal communication. Port Graham, Alaska.
- Clark, Donald W.
1984 Pacific Eskimo: Historical Ethnography. *In* Handbook of North American Indians: Arctic. Vol. 5. D. Damas, ed., pp. 185-197. Washington, D.C.: Smithsonian Institution.

- Cook, Alma
1980 Maskalataq. *In* Alexandrovsk: English Bay in Its Traditional Way, pp. 58-59. Kenai Peninsula Borough School District.
- Crowell, Aron L.
1993 Severity of Climate, Wildness of Nature: Preliminary Report on Archaeological Results of the 1993 NASI Survey of Kenai Fjords National Park, Alaska. Department of Anthropology, University of California, Berkeley.
- Davis, Nancy Yaw
1977 Chapter 1: An Historical Overview. *In* *Ggwangkumtenek Sungcarluta*. Gregg Brelsford, ed. Anchorage: North Pacific Rim.

1987 English Bay: History and Continuity. Paper prepared for Alaska Legal Services.
- Davydov, Gaviil
1977 [original 1810 - 1812] Two Voyages to Russian America, 1802 - 1807. Kingston, Ontario: Limestone Press.
- DeArmond, Robert
1969a The Fur Trade of Cook Inlet 1867-1900. Juneau, Alaska. Manuscript, on file, Alaska Department of Fish and Game, Division of Subsistence, Anchorage.

1969b The Cook Inlet Fishing Industry. Juneau, Alaska. Manuscript, on file, Alaska Department of Fish and Game, Division of Subsistence, Anchorage.
- de Laguna, Frederica
1934 (Reprinted 1975) The Archaeology of Cook Inlet, Alaska. Philadelphia: University of Pennsylvania Museum.

1956 Chugach Prehistory. Seattle: University of Washington Publications in Anthropology, Bryn Mawr College.
- Denham, Woodrow W.
1977 Ethnographic Background Report: Gulf of Alaska OCS Region. Unpublished manuscript on file, Alaska Department of Fish and Game, Division of Subsistence, Anchorage.
- Emmal, Don
1997 Future of Kenai Fjords Park Assured. *In* Restoration Update. *Exxon Valdez* Oil Spill Trustee Council 4(2):1,3.
- Fall, James A., and Charles Utermohle, editors,
1995 An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska Volume III, Chapter IX. United States Department of the Interior, Minerals Management Service Technical Report No. 160. OCS Study MMS-95-012. Anchorage
- Fall, James A.
1999 Long Term Sociocultural Consequences of the Exxon Valdez Oil Spill. EVOSTC Project No. 99471. Division of Subsistence, Alaska Department of Fish and Game. Anchorage.
- Grant, U.S., and D. F. Higgins
1913 Coastal Glaciers of Prince William Sound and Kenai Peninsula, Alaska. United States Geological Survey, Bulletin 526. Washington, D.C.

- Hallamaa, Panu
199? Unangam Tunuu and Sugtestun: A Struggle for Life.
- Haggerty, James C., Christopher B. Wooley, Jon M. Erlandson, and Aron Crowell
1991 The 1990 Exxon Cultural Resource Program Site Protection and Maritime Cultural Ecology in Prince William Sound and the Gulf of Alaska. Anchorage: Exxon Shipping Company and Exxon Company, U.S.A.
- Hassen, Harold
1978 The Effect of European and American Contact on the Chugach Eskimo of Prince William Sound, Alaska, 1741-1930. Unpublished Ph.D dissertation, University of Wisconsin-Milwaukee.
- Jacobsen, Johan Adrian
1977 [original 1884] Alaska Voyage 1881 - 1883: An Expedition to the Northwest Coast of America. Chicago and London: University of Chicago Press.
- Johnson, John
1984 Chugach Legends: Stories and Photographs of the Chugach Region. Chugach Alaska Corporation. ``Anchorage.
- Klein, Janet
1981 A History of Kachemak Bay, the Country, the Communities. Homer Society of Natural History. Homer, Alaska
- Kvasnikoff, John
1997 Personal communication. Nanwalek, Alaska.
- Kvasnikoff, Simeon (Anahonak)
1995 Personal communication. Port Graham, Alaska.
1997 Personal communication. Port Graham, Alaska.
- Kvasnikoff, Vincent
1983 Personal communication. Nanwalek, Alaska.
- Lantis, Margaret, editor
1970 Ethnohistory in Southwestern Alaska and the Southern Yukon: Method and Content. Lexington: University of Kentucky Press.
- Leer, Jeff
1978 *Nanwalegmiut Paluwigmiut-Ilu Nupugnerit: Conversational Alutiiq Dictionary*, Kenai Peninsula Alutiiq. Anchorage: National Bilingual Materials Development Center.
1980 Kenai Peninsula Alutiiq Placenames. University of Alaska, Fairbanks. Alaska Native Language Center.
- Malchoff, Mary
1997 Personal communication. Port Graham, Alaska.
- McMahan, David J., and Charles E. Holmes
1987 Report of Archaeological and Historical Investigations at Nuka Island and the Adjacent Kenai Peninsula, Gulf of Alaska. Office of History and Archaeology, Division of Parks and Outdoor Recreation, Alaska Department of Natural Resources, Anchorage.
- McMullen, Elenore

- 1995 Transcript of taped interview. On file, ADF&G, Division of Subsistence, Anchorage.
- 1997 Transcript of taped interview. On file, ADF&G, Division of Subsistence, Anchorage.
- 1997 Personal communication. Port Graham, Alaska.
- 1998 Personal communication. Port Graham, Alaska.
- Meganack, Walter Sr.
- 1981 I Was Born Between Two Cultures. *In Fireweed: Cillqaq*, pp. 23-37. Kenai Peninsula Borough School District.
- 1982 Personal communication. Port Graham, Alaska.
- 1983 Personal communication. Port Graham, Alaska.
- 1989 Personal communication. Port Graham, Alaska
- Merck, Carl H.
- 1980 Siberia and Northwestern America 1788-1792: The Journal of Carl Heinrich Merck, Naturalist with the Russian Scientific Expedition Led by Captains Joseph Billings and Gavril Sarychev. Kingston, Ontario: The Limestone Press.
- Mishler, Craig
- 1988 The *Nuta'aq*: Musical Folk Drama in English Bay. A Paper Presented to the Alaska Anthropological Association Annual Meeting, Fairbanks.
- Moonin, Herman
- 1980 Killer Whales. *In Alexandrovsk: English Bay in Its Traditional Way*, Volume 1: 75-76. Kenai Peninsula Borough School District
- Moonin, Luba
- 1997 Personal communication. Port Graham, Alaska.
- Moonin, Mickey
- 1981 I've Sure Enjoyed Whatever I've Done. *In Fireweed: Cillqaq*, pp. 13-18. Kenai Peninsula Borough School District.
- 1982 Farming on Passage Island as Remembered by Mickey Moonin. *In Fireweed: Cillqaq*. Life and Times in Port Graham, No. 3., pp. 16-18. Kenai Peninsula Borough School District.
- Moonin, Sergius
- 1980a The Young Bear Hunter. *In Alexandrovsk: English Bay in Its Traditional Way*, Volume 1: 81-82. Kenai Peninsula Borough School District.
- 1980b Bigfoot Legend. *In Alexandrovsk: English Bay in Its Traditional Way*, Volume 1: 79 - 80. Kenai Peninsula Borough School District.
- 1981 Recollections. *In Alexandrovsk: English Bay in Its Traditional Way*, Volume 2: 28-31. Kenai Peninsula Borough School District.
- 1985 Personal communication. Port Graham, Alaska.
- Norman, Pat
- 1997 Personal communication. Port Graham, Alaska.

- Petroff, Ivan
1884 Report on the Population, Industries, and Resources of Alaska: 10th Census of the United States 1880. Washington: Government Printing Office.
- Porter, Robert P.
1893 Report on Population and Resources Alaska at the Eleventh Census: 1890. Washington: Government Printing Office.
- Portlock, Nathaniel
1789 A Voyage of Discovery Round the World; But Most Particularly to the Northwest Coast of America Performed in 1785, 1786, 1787, 1788 in the King George and Queen Charlotte by Captains Portlock and Dixon. London: John Stockdale.
- Schaff, Jeanne, and Lora Johnson
1990 Upland Investigations as SEL-188 McArthur Pass, Kenai Fjords National Park. National Park Service, Alaska Regional Office, Anchorage.
- Scudder, H. C.
1970 The Alaska Salmon Trap: Its Evolution, Conflicts, and Consequences. Alaska State Library Historical Monographs Number 1. Juneau.
- Selkregg, Lidia S., coordinator and preparer
1974 Alaska Regional Profiles: Southcentral Region. Fairbanks: University of Alaska Arctic Environment Information and Data Center.
- Stanek, Ronald T.
1985 Patterns of Wild Resource Use in English Bay and Port Graham, Alaska. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 104.

1995a Port Graham. *In* An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska, James A. Fall and Charles Utermohle, editors, Volume III, Chapter VIII. United States Department of the Interior, Minerals Management Service Technical Report No. 160. OCS Study MMS-95-012. Anchorage.

1995b Nanwalek. *In* An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska, James A. Fall and Charles Utermohle, editors, Volume III, Chapter IX. United States Department of the Interior, Minerals Management Service Technical Report No. 160. OCS Study MMS-95-012. Anchorage.
- Tanape, Joe
1982 Personal communication. Nanwalek, Alaska.

1983 Personal communication. Nanwalek, Alaska.
- Tikhmenev, P. A.
1939 - 1940 The Historical Review of the Formation of the Russian American Company and Its Activity up to the Present Time, 2 Parts. St. Petersburg. Translated by Dimitri Krenov. Works Project Administration, Seattle, Washington.

1978 A History of the Russian American Company. Translated and edited by R. Pierce and A. S. Donnelly. Seattle: University of Washington Press.
- Ukatish, Ben
1983 Personal communication. Nanwalek, Alaska.

Ukatish, Seraphim

1997 Personal communication. Nanwalek, Alaska

United States Coast Guard

1988 OSC Report, M/V Glacier Bay, Major Crude Oil Spill Response, Cook Inlet, Kenai, Alaska.
Department of Transportation, Commander, 17th Coast Guard District, Juneau.

United States Department of Commerce

1992 Summary of Social, Economic, and Housing Characteristics: Alaska. 1990 Census of Population and Housing. US Bureau of the Census. Report 1990 CPH-5-3.

United States Department of the Interior

1997 Agreement for the Sale of Lands from the English Bay Corporation by the United States of America. National Park Service, Lands Resources Program Center, 2525 Gambell St., Anchorage, Alaska.

Vancouver, George

1984 [original 1801] A Voyage of Discovery to the North Pacific Ocean and Round the World, 1791 - 1794. Four Volumes, edited by W. Kaye Lamb. London: The Hakluyt Society.

Wennekens, Alix Jane

1985 Traditional Plant Usage by Chugach Natives Around Prince William Sound and the Lower Kenai Peninsula. Unpublished M.A. thesis, University of Alaska-Anchorage.

Woodbury, Anthony C.

1984 Eskimo and Aleut Languages. *In* Handbook of North American Indians. Vol. 5: Arctic. David Damas, ed., pp. 49-63. Washington, D.C.: Smithsonian Institution Press.

Workman, William B.

1996 Personal communication. University of Alaska Anchorage, Department of Anthropology.

Workman, William B. and Karen Wood Workman

1988 The Last 1300 Years of Prehistory in Kachemak Bay: Where Later is Less. *In* The Late Prehistoric Development of Alaska's Native People, R.D. Shaw, R.K. Harritt, and D.E. Dumond, editors, pp. 339-354. Aurora: Alaska Anthropological Association Monograph Number 4.

Workman, William B., John E. Lobdell, and Karen Wood Workman

1980 Recent Archeological Work in Kachemak Bay, Gulf of Alaska. *Arctic* 33(3):385-399.

APPENDIX I: WILD RESOURCES USED BY RESIDENTS OF NANWALEK AND PORT GRAHAM

<u>English</u>	<u>Alutiiq and Russian</u>	<u>Scientific</u>
<i>Finfish</i>	<i>iqalluk</i>	
Chinook (King) Salmon	<i>lluq'akaq</i>	<u>Onchorhynchus tshawytscha</u> (Walbaum)
Sockeye (Red) Salmon Spawning stage	<i>niklliq</i> <i>narilngaataq</i>	<u>Onchorhynchus nerka</u> (Walbaum)
Pink (Humpback) Salmon In ocean and stream	<i>amartuq</i>	<u>Onchorhynchus gorbuscha</u> (Walbaum)
Coho (Silver) Salmon	<i>qakii'aq</i>	<u>Onchorhynchus kisutch</u> (Walbaum)
Chum (Dog) Salmon	<i>alimaq</i>	<u>Onchorhynchus keta</u> (Walbaum)
Steelhead	<i>mayu'artaq</i>	<u>Onchorhynchus mykiss</u>
Dolly Varden	<i>saaguayaq</i>	<u>Salvelinus malma</u> (Walbaum)
Rainbow Trout	<i>mayu'artaruq</i>	<u>Salmo gairdneri</u> (Richardson)
Halibut	<i>sagiq</i>	<u>Hippoglossus stenolepis</u> (Schmidt)
Starry Flounder	<i>ggagtuliq</i>	<u>Pleuronectes stellatus</u> (Pallas)
Rock Flounder	<i>patuqulluk</i>	<u>Lepidosetta bilineata</u> (Ayres)
Black Rockfish	<i>tukuq</i>	<u>Sabastes melanops</u> (Girard)
Yelloweye (Red Snapper)	<i>kushmaq</i>	<u>Sebastes ruberrimus</u> (Cramer)
Unidentified Rockfishes		Scorpaenidae
Pacific Herring	<i>iqalluarpak</i>	<u>Clupea harengus</u> (Valenciennes)
Pacific Tomcod	<i>saakelaq</i>	<u>Microgadus proximus</u> (Girard)
Pacific Cod	<i>atggiaq</i>	<u>Gadus macrocephalus</u> (Tilesius)
Kelp Greenling (Sea bass)	<i>culugpau'aq</i> (<i>tilpuuk</i> -Russian)	<u>Hexagrammos decagrammus</u> (Pallas)
Lingcod	<i>atggiaq</i>	<u>Opiodon elongatus</u> (Girard)
Walleye Pollock (Whiting)	<i>rrirliq</i>	<u>Theragra chalcogramma</u> (Pallas)
Unidentified Sculpins	<i>ciilerpak</i>	Cottidae
Yellow-bellied Irish Lord	<i>kala'aq</i>	<u>Hemilepidotus jordani</u> (Bean)
"White-bellied" Irish Lord	<i>asirnaq</i>	<u>Hemilepidotus spp.</u>
Fish Eggs	<i>qaryat</i>	(Several species of fish)
<i>Shellfish</i>		
Clam	<i>salaq</i>	
Butter Clam		<u>Saxidomus giganteus</u> Deshayes
Surf Clam	<i>ququlqiq</i>	<u>Spisula sp.</u>
Horse Clam	<i>salarnilnguq</i>	<u>Tresus capax</u> (Gould)
Littleneck Clam	<i>alilget</i>	<u>Protothaca staminea</u> (Con.)
Soft-shelled Clam		<u>Mya truncata</u>

APENDIX I: CONTINUED

<u>English</u>	<u>Alutiig/Russian</u>	<u>Scientific</u>
Razor Clam	<i>cingtaataq</i>	<u>Siliqua patula</u> Dixon
Scallop		<u>Pecten caurinus</u> Gould
Cockle	<i>taugtaa</i>	<u>Clinocardium nuttallii</u> (Conrad)
Blue Mussel	<i>amyak</i>	<u>Mytilus edulis</u> Linne'
Chiton		
Black Katy	<i>urriitaa</i>	<u>Katharina tunicata</u> Wood
Giant Chiton (Gumboot)	<i>urriitarpak</i>	<u>Cryptochiton stelleri</u> Midd.
Dungeness Crab	<i>yual'ayak</i>	<u>Cancer magister</u> Dana
King Crab	<i>yual'ayakcak</i>	<u>Paralithodes camtschatica</u> (Tilesius)
Tanner Crab		<u>Chionoecetes bairdi</u>
Limpet	<i>malungqucit</i>	<u>Acmaea</u> spp.
Octopus	<i>amikuq</i>	<u>Octopus dofleini</u>
Sea Cucumber	<i>inarngalraaq</i>	Holothuroidea
Sea Urchin	<i>uutuk</i>	<u>Strongylocentrotus</u> spp.
Shrimp		Pandalidae
Snail	<i>ipuk</i>	<u>Nucella emarginata</u>
Hairy Triton	<i>qanallqiq</i>	<u>Fusitriton oregonensis</u>
"Coffee Snail"	<i>kauk</i>	
<i>Marine Mammals</i>		
Harbor Seal	<i>qaigyaq</i>	<u>Phoca vitulina</u>
Sea Lion	<i>wiinaq</i>	<u>Eumetopias jubatus</u>
Sea Otter	<i>ikam'aa</i>	<u>Enhydra lutris</u>
<i>Land Mammals</i>		
Black Bear	<i>tan'erliq</i>	<u>Ursus americanus</u>
Dall Sheep	<i>sepaa'aa</i>	<u>Ovis dalli</u>
Moose	<i>tegliliq</i>	<u>Alces alces</u>
Mountain Goat	<i>pehnaiq</i>	<u>Oreamnos americanus</u>
Marmot	<i>quirriq</i>	<u>Marmota caligata</u>
Porcupine	<i>qangateraq</i>	<u>Erethizon dorsatum</u>
Weasel	<i>amitatuk</i>	<u>Mustela ermina</u>
Marten	<i>gaugcicuaq</i>	<u>Martes americana</u>
Mink	<i>el'kuayaq</i>	<u>Mustela vison</u>
Land Otter	<i>kep'arkaq</i>	<u>Lutra canadensis</u>
Coyote	<i>kayutaq</i>	<u>Canis latrans</u>
Wolf	<i>kaganaq</i>	<u>Canis lupus</u>
Lynx	<i>etartuliq</i>	<u>Lynx canadensis</u>

APPENDIX I: CONTINUED0

Snowshoe Hare	<i>uka'ik</i>	<u>Lepus americanus</u>
Red Squirrel	<i>elkiaq</i>	<u>Tamia sciurus hudsonicus</u>
Birds		
Small Gulls	<i>egyaaq</i>	<u>Larus</u> spp.
Glaucous-winged Gull	<i>naruyaq</i>	<u>Larus glaucescens</u>
Oystercatcher	<i>kiuksaa'aq</i>	<u>Haematopus bachmani</u>
Puffin	<i>ngaaqngaaq</i>	<u>Fratercula corniculata</u>
Pigeon guillemot	<i>cuu'aq</i>	<u>Cephus columba</u>
Loons	<i>tuullek</i>	<u>Gavia</u> spp.
Double-crested Cormorant	<i>agayuuq</i>	<u>Plalacrocorax auritus</u>
Pelagic Cormorant	<i>platuguwaq</i>	<u>Phalacrocorax pelagicus</u>
Common Snipe	<i>kulickiiq</i>	<u>Capella gallimago</u>
Spruce Grouse	<i>egtugtuliq</i>	<u>Canachites canadensis</u>
Ptarmigan	<i>qategyuk</i>	<u>Lagopus</u> spp.
Ducks	<i>saqulek</i>	
Mallard	<i>nillqitak</i>	<u>Anas platyrhynchos</u>
Green-winged teal	<i>nillqitakwaq</i>	<u>Anas carolinensis</u>
Pintail	<i>amutaarualek</i>	<u>Anas acuta</u>
Common Goldeneye (Whistler)	<i>nasqurtuliq</i>	<u>Bucephala clangula</u>
Bufflehead (Butterball)	<i>nacallngaayak</i>	<u>Bucephala albeola</u>
Red-breasted Merganser (Sawbill)	<i>piaq</i>	<u>Mergus serrator</u>
Old Squaw	<i>aarraangiiq</i>	<u>Clangula hyemalis</u>
White-winged Scoter	<i>cuu'arnaq</i>	<u>Melanitta fusca deglandi</u>
Black Scoter (Blackduck)	<i>kukumyaaq</i>	<u>Melanitta nigra americana</u>
Surf Scoter	<i>tunuculek</i>	<u>Melanitta perspicillata</u>
Common Eider	<i>qaanillqaacak</i>	<u>Somateria mollissima</u>
Lesser Scaup	<i>egtuk</i>	<u>Athya affinis</u>
Harlequin Duck (Rock Duck)	<i>ungunguasaq</i>	<u>Histrionicus histrionicus</u>
American Widgeon		<u>Anas americana</u>
Canada Goose	<i>temngiaq</i>	<u>Branta canadensis</u>
Black Brant (Kelp Goose)	<i>kahnguk</i>	<u>Branta nigricans</u>
Plants		
Alder	<i>ugwiq</i>	<u>Alnus crispa</u> (Ait.) (Pursh)
Alder "berries"	<i>qaruskaq</i>	
Beach Grass (roots)	<i>ggal'utet</i>	<u>Elymus arenarius</u> L.

APPENDIX I: CONTINUED

Bethlehem Star	<i>ikignganaq</i>	<u>Moneses uniflora</u> L. Gray
Black Seaweed	<i>caqallqaq</i>	<u>Porphyra perforata</u>
Blueberries	<i>atsaq</i>	<u>Vaccinium ovalifolium</u> Sm.
Bulb Kelp	<i>qahnguuq</i>	<u>Nereocystis leutkeana</u>
Chamomile	<i>alam'aaskaq</i>	<u>Matricaria matricarioides</u> (Less.) Porter
Cow Parsnip	<i>ugyuutet</i> or <i>kaangkaq</i> <i>ggish</i> (Dena'ina) <i>pushki</i> (Russian)	<u>Heracleum lanatum</u> (Michx.)
Crowberry	<i>pakik</i>	<u>Empetrum nigrum</u> L.
Currents	<i>cunisiq</i>	<u>Ribes</u> spp. L.
Devil's Club	<i>cukilanaa</i>	<u>Echinopanax horridum</u> (Sm.)
Elderberry	<i>saanarliq</i>	<u>Sambucus</u> sp.
Fireweed	<i>cerlit</i>	<u>Epilobium angustifolium</u> L.
High-bush Cranberry	<i>qalakuaq</i>	<u>Viburnum edule</u> (Michx.) (Raf.)
Indian Rice	<i>arpaauaq</i>	<u>Fritillaria camschatcensis</u> L.
Lavender Daisy	<i>teptukuuyaq</i>	<u>Aster subspicatus</u> Nees
Low-bush Cranberry	<i>inaq'amciq</i>	<u>Vaccinium</u> spp. or <u>Oxycoccus</u> spp.
Mountain Ash	<i>esqunaq</i>	<u>Sorbus sitchensis</u> (Roem.) <u>scopolina</u> Greene
Nagoonberry	<i>puyumaq</i>	<u>Rubus chamaemorus</u> L.
Nettle	<i>uqayanaq</i>	<u>Urtica gracilis</u> (Ait.)
Plantain (Goose Tongue)	<i>wegauq</i>	<u>Plantago maritima</u> L.
Rose Hip	<i>qelepmaq</i>	<u>Rosa</u> spp. L.
Salmonberry		<u>Rubus spectabilis</u>
Red berries	<i>alagnaq</i>	
Yellow berries	<i>kasaapaq</i>	
Sitka Spruce	<i>napaq</i>	<u>Picea sitchensis</u> (Bong.)(Carr.) L.
Sourdock	<i>quunarliq</i>	<u>Rumex arcticus</u> Trantv.
Sweet Coltsfoot	<i>nausak</i>	<u>Petasites hyperboreus</u> Hydb.
Trailing Raspberry	<i>malruukegtaa</i>	<u>Rubus pedatus</u> Sm.
Tundra Rose	<i>qutuliiq</i>	<u>Potentilla fruticosa</u> L.
Wild Parsley	<i>pitruuskaq</i> (<i>petrushki</i> - Russian)	<u>Lingusticum scoticum</u> L.
Wild Chive (Onion)	<i>luk</i>	<u>Allium schoenoprasum</u> L.
Yarrow	<i>qanganaruaq</i>	<u>Achilla borealis</u> Bong.

Sources: Stanek 1985; Leer 1978; Port Graham and Nanwalek Residents.